

## SEQUENCE LISTING

<110> SPECHT, THOMAS  
 HINZMANN, BERND  
 SCHMITT, ARMIN  
 PILARSKY, CHRISTIAN  
 DAHL, EDGAR  
 ROSENTHAL, ANDRE

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<141> 2000-09-08

<150> PCT/DE99/00722

<151> 1999-03-09

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662

&lt;210&gt; 19

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 19

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750

&lt;210&gt; 20

&lt;400&gt; 20

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<210> 22

<400> 22  
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 <211> 580  
 <212> DNA  
 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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<210> 25

<400> 25

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<210> 26

<211> 975

<212> DNA

<213> Homo sapiens

<400> 26

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<210> 27

<211> 854

<212> DNA

<213> Homo sapiens

<400> 27

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<210> 28

<211> 802

<212> DNA

<213> Homo sapiens

<400> 28

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gccattaggt aggaggaaat ctggagagtg aaaagggggc ttgcttttgt caaagtcctc 180
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<210> 29

<211> 807

<212> DNA

<213> Homo sapiens

<400> 29

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<210> 30

<211> 777

<212> DNA

<213> Homo sapiens

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<400> 30
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<210> 31
<211> 501
<212> DNA
<213> Homo sapiens

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<210> 32
<211> 1104
<212> DNA
<213> Homo sapiens

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<400> 32
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acaatgctga  atgactggaa  agaagaactg  atatggctag  ttcagctagc  tggtagagat  1020
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 <212> DNA  
 <213> Homo sapiens

<400> 33  
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<210> 34

<400> 34  
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<210> 35  
 <211> 826  
 <212> DNA  
 <213> Homo sapiens

<400> 35  
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 ccttgctcatt tgggggattt tattttactt tgttgcttta aaattcaatg cagagaagtt 780  
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<210> 36  
 <211> 578  
 <212> DNA  
 <213> Homo sapiens

<400> 36

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<210> 37

<211> 799

<212> DNA

<213> Homo sapiens

<400> 37

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caggccctag gacttaaat 799

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<210> 38

<400> 38

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<210> 39

<211> 1743

<212> DNA

<213> Homo sapiens

<400> 39

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aagcaggtcc cttgcccaga ccctcaggga gcccttttgg tggatagcgg acacctgagg 180
caggaggtgg cagggggcaa gtccaggcag gcagcagcag ggctgcaact gagagctgag 240
gctggagagg tagcgctcgc cctaacctga tctgcaggt ctcaggccct ggggtcatat 300
actcgcccca tgaagacagg gaacttgctg tgctgggtccc agagcacgaa gaggaagggc 360
tgctgcactt caaagaccag caggggtgcgg gccacagaga tggcggaggc tgcagccgcc 420
tccaccccag tctctgtcag ttccagcact gtctgggtgt gcatcgaga aacctgaaga 480
tctgggtcct ctgtcagccc acacaggtta aggtcataag aaaaatcgaa gaattccaat 540
ttctccatga ttgagacat atcctggctg gtcgtcact tgatgcgggg tagtgtagg 600
agagtgggct ggaacttgga catctccagt ttctccatga tggccttgaa aacagaaggg 660
ctgagagcct gttccatgtc ttcaagacga tgtttcagggt tctgggggtac caggatcacc 720

```

```

aaactcagat tgtgggagag ctgcagctgc cccaccttgg ctttcaaagt ttggtcaatg 780
aaatgggcca caggggtactt cttgctattc atcatgggca cttttataac tgagtttttg 840
aagtgaagg gttccattct ggttttcttg ggatcaaagt ttgtcttcca cttggcactc 900
aggtagatag cattgaggag gacaaggcgg gtatcggagg gcagactgtc tagcagccgg 960
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caagaagtac cctgtggccc atttcattga ccaaactttg aaagccaagg tggggcagct 1080
gcagctctcc cacaatctga gtttggtgat cctggtaccc cagaacctga aacatcgtct 1140
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tggaattggc cctgccacc tcctgcctca ggtgtccgct atccaccaa agggctccct 1680
gagggctctg ggcaagggac cgtgcttcta attaagccct tcttccaatg ggccttgc 1740
ggc 1743

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<210> 40

<400> 40

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<210> 41

<211> 1183

<212> DNA

<213> Homo sapiens

<400> 41

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ctcacctgcc cccacctctt ggctggcatt gtggcggtga gctgctggct gcctctgcac 120
cgggccttcc cccaggcagc taatggcagt gccaggacc tggccatact ccagtgccat 180
ggggagctgg accccatggt gcccgtagcg tttggggccc tgacggctga gaagctccgg 240
tctgttgtca cacctgccag ggtccagttc aagacatacc cgggtgtcat gcacagctcc 300
tgtcctcagg agatggcagc tgtgaaggaa tttcttgaga agctgctgcc tcctgtctaa 360
ctagtgcgtg gccccagtgc agtaccctag ctcatggggg actcagcaag caagcgtggc 420
accatcttgg atctgagccg gtcgagcccc tgtccccacc ctccctgacc tgtccttttc 480
ccacaggcct ctgggggcag gtggcaaggc ctggccgggc ctcccttcc ggccttagcc 540
acctggctct gtctgcagca ggggcaggct gctttcttat ccatttccct ggaggcgggc 600
ccccctggca gcagtattgg aggggctaca ggcagctgga gaaagggggc cagccgctga 660
cccactcact caggacctca ctactagcc ccgctttggg cccctcctg tgacctcagg 720
gtttggccca tggggccctc ccaggccctt gcccactg attctgccc gataatcgtg 780
tctcctgcct cactcagct gcttctcagt catgaatgtg gccatggccc cgggggtccc 840
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gctgtctcac cccactttg tccccactct agagcagggg ggcagtgggg gaggattgt 1080
gtctcgtctt ctgtctccat gtggtttttt ggtgtttttt ttgttgtgtc ctggattccg 1140
ataaaattaa agaaattgct tcctcaaaaa aaaaaaaaaa aaa 1183

```

<210> 42

<211> 768

<212> DNA

<213> Homo sapiens

&lt;400&gt; 42

```

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tttcagtacc cacatttaat gaggaaaaaa tgttttacca atgaaggagg aattctttaa 120
ttagctgtaa tgtaggttg gagaaaattt ggtatttagg gtattttcaa ggtaccatca 180
aatcagattt ctgttttttt gtaaaaaaaa atttttttta tcagtattgt ttttacaagt 240
aatatacttt gaaactcttg aactaatagt ctcaaaaact ctagaggaca gtctgagaac 300
acgtatttct attgttctaa ataaatacat gtttttgaat agttcaatca tgaattattg 360
actatgtcct catcaaaagt gttaatccct ctccagggtct ctggtgaaga ccttcaagag 420
tttggttttt tctcccagga aattggaagg tagaattgta aattcataga acttctttta 480
taatggtgta cctcagcagc tgcccttcaa tttatgccaa gtccttacag agtttatact 540
tgaatagtaa atatgtcttc tgagttttac agtgtcttaa actcaatgca catttttttt 600
tcttcttttt ccacccttc ttgtttgtag ttcattatac ctgtcctatt acagaactga 660
tttccttctt ggctgtacat gttggggtgc tggatttttt tccgtgtctt tagtcttcgg 720
atacatgttc tcttcttttag cttgtggtga atacagtaat ttgcattg 768

```

&lt;210&gt; 43

&lt;211&gt; 1029

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 43

```

ccctgctgtg aagtcctggc aggtgttggt aatgtgtgga aatgcagtca gcaagtttgc 60
tggggagttt gataaaagta taaaacaaaa caaaaaaagc ctcggtataa ttttgttcca 120
cgacttcttc tgtagcttta caccagaagg aaggaatggg ctacagcagg tagtggagga 180
agaggggggt gagcagggtg attaaaatag cttacgggta aggcctaaaa ggtcaccctc 240
cggccccctc tccaaaagaa gggcatgggc acccccagga gaggatggcc ccaaaaacct 300
tatttttata catgagagta aataaacata ttttttttac aaaaataact tctgaattta 360
tcagtgtttt gccgttaaaa atattcctct atagtaaatt atttattgga agatgacttt 420
tttaaagctg ccgtttgcct tggcttggtt tcatacactg atttattttt ctatgccagg 480
cagtagagtc tctctgcctc tgaggagcag gctaccgcga tcccactcag cccctcccta 540
cccctcaaga tttgatgaaa attccaacca tgaggatggg tgcacggggg aaggggtgaga 600
aggagagcct gcctgctcag ggatccaggc tcgtagagtc actccctgcc cgtctcccag 660
agatgcttca ccagcacctg cctctgagac ctgcctctct gttccagcaa ccctggttgg 720
ggggtcagac ttgatacact ttcagggttg gagtggaacc accccagggc ctgctgagga 780
cagagcagcc aggccgtcct ggctcacttt gcagttggca ctgggttggg gaggaagaga 840
gctgatgagt gtggcttccc tgagctgggg tttccctgct tgtccagttg tgagctgtcc 900
tcggtgttac cgaggctgtg cctagagagt ggagattttt gatgaaaggt gtgctcgctc 960
tctgcgttct atcttctctc tcctccttgt tccgtgcaac cacaagataa aggtagtggg 1020
gtgtctcga 1029

```

&lt;210&gt; 44

&lt;211&gt; 736

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 44

```

attcctgggt tgaaatattt tgtagggatt gcttattata ttatttttagc tgatgaacct 60
caggacaacg gctacagaca cacacataca tacacgcaca caaaatctca gctgttgaag 120
agtgggcttg gaatcagact tctgtgtcca gtaaaaaact cctgcactga agtcattgtg 180
acttgagtag ttacagactg attccagtga acttgatcta atttcttttg atctaataa 240
tgtgtctgct taccttgttt ccttttaatt gataagctcc aagtagttgc taattttttg 300
acaactttaa atgagtttca ttcacttctt ttacttaatg ttttaagtat agtaccaata 360
atttcattaa cctgttctca agtggtttag ctaccattct gccattttta atttttattt 420
aattttattt gcttgagcac actgatcaac ctactgaactg ccttcttcca ttgtcctgca 480
atgatataag ggttacattt ttgtgtatat ggctttcata gttgggattt cagagcactg 540

```

```

ataccagata ttttcagttt gttctctggg ggaatttcat ttgcatctat gtttttagct 600
atctgtgata acttggttaa tattaataaag atattttgct tctattggaa cattttgtata 660
ctcgcaacta tatttctgta aacagctgca gtcaaaaata aaacactgaa agttttcatt 720
ttgcagtgga aaaaaa 736

```

<210> 45

<400> 45  
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<210> 46

<211> 1159

<212> DNA

<213> Homo sapiens

<400> 46

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caagggtggc agcgacacac agttctaccc tggcctcggg ctggccctgg ccttccacga 120
cggcagcgtc cacatcgtgc accggctctc actgcagacc atggccgtct tctacagctc 180
cgcggccccc aggcctgtgg atgagccggc catgaagcgc ccccgacccg cgggccccgc 240
cgtccactta aaggctatgc agctatcgtg gacgtcactg gccctgggtg ggattgacag 300
ccacgggaag ctgagcgtgc tccgcctctc accttccatg ggccacccgc tggagggtggg 360
gctggcgctg cggcacctgc tcttctgtgt ggagtactgc atggtgaccg gctacgactg 420
gtgggacatc ctgctgcacg tgcagcccag tatggtacag agcctgggtg agaagctgca 480
cgaggagtac acgcgccaga ccgctgccct gcagcaggtc ctctccaccc ggatcctggc 540
catgaaggcc tcgctctgca agctgtcgcc ctgcacgggt acccgctgtg gcgactacca 600
caccaagctc ttcctcatcg ccatcagctc caccctgaag tcgctgctgc gccccactt 660
tctcaacacg cctgacaaga gcccggcgca ccggtgacc gagatctgca ccaagatcac 720
cgacgtcgac attgacaagg tcatgatcaa cctcaagacg gaggaatttg tgcaggacat 780
gaacacactg cagggcgctg cagcagctct tgcagtgggt gggcgacttc gtgctgtacc 840
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agccggacga ggcgtggtg gatgaatgct gcctgctgcc cagccagctg cttatcccca 1140
gcctggactg gctgccagc 1159

```

<210> 47

<211> 690

<212> DNA

<213> Homo sapiens

<400> 47

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agagcggcgc cccctctttt tttctctttt tttttttttt tttttgcata tcagaaatgc 60
attttaattt ttatttgaaa acaacttaaa ttttttagaca aatgatttta gtatataaat 120
ttgcttttgt ttttatacag aatataaaga tttccctcat taatcttcca tgtgaagggt 180
attacaagcc tggaggaaga tactttctgc acacaagtat gtatcttatg tgtgcagtat 240
tggaaccaa tgggtgtagt ctctacaca taaatggggc caagtacat cacaattaa 300
aagggggaaa gagaaatatt ctagttaatc agatgcaaga agcaaacaag acgcaaaaac 360
tgtgcaaata agaccaagcc agtaacttta gttacgacac tgcagattac actggaataa 420
caggtttgtg aggctatagt gtgcaccaca ttaaaacagc aagaaagagc tatattata 480
gaaaggctgg aatgagggat ttttactaaa gcaaattaac ttcttgtcaa ctgcaaaaac 540
aaaacaaaac tgagcatatg agtgtagta tactgaaggc atgttatacc agtttctgtg 600
cagcatgcta aaagttagaa cttcttcact ggtgcttatc aatcattaat agtcacgttt 660
ttgccccttc ttgccaaatt tcgaggcatg 690

```



<210> 48

<400> 48  
000

<210> 49

<400> 49  
000

<210> 50

<400> 50  
000

<210> 51

<211> 1186

<212> DNA

<213> Homo sapiens

<400> 51

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accatagatt tatttttaaaa gggaaaaatct cacacataat taagcagtgg aaaatgtgct 60
caatgctatg gtgcgtcagg cctctgtgtc accagggttc tcccgctttc tgcagagctg 120
tggaccctgt acgtaccaa caggtgaact tgggccatct ttccttcttc ctttttttgc 180
acatttgcat ttatatcttc ctgtactaaa agaaacaaat tatttataat tggggtgaca 240
atataaagga acaaaaagatg gggcaatagt tgcttcctag ctggagctgt aagtccatgt 300
tacagaaact cactatttaa aaagttttaa aagatttatg aaccttgtcc tacaattcgc 360
tgaatactta tttgtctttt aaactcccct cgggtgtatgg atcatcttcg tcagaatgcc 420
gttggtttcat tgtgaatcag gggaaaaatgt taatcatttg gagactgttt tcttattacc 480
aaatgtacaa tccataagac aactgaaagc aacaactgct gggttcactg acaaagatta 540
taaaaatcat cacgttcaaa gtagagtttt tagccaaggc caagaactaa cctggggctg 600
agtcagcgtc tctaccact taaataacag cgtaaagatc tttcactaaa ttcgttatgt 660
ggctctgtctg gatgtaaacc tatatatctt cttttgaaac agaatacat cctgcagact 720
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caaagttatt attttctccg aacgtgtttg tgatcttctg ttatatattg gggcatgtta 1080
cctttatggg atataagctg tagtgcatat tctttgtatt gcaaaaaact ggtcagtaat 1140
ttatgtacat gtattccaca ttttagtggt cttgaagtga caatcc 1186

```

<210> 52

<211> 1029

<212> DNA

<213> Homo sapiens

<220>

<221> modified\_base

<222> (774)

<223> a, t, c or g

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<400> 52
gggagaagga ggaggccggg ggaaggagga gacaggagga ggagggacca cgggggtggag 60
gggagataga cccagcccag agctctgagt ggtttcctgt tgcctgtctc taaacccctc 120
cacattcccg cggtccttca gactgcccgg agagcgcgct ctgcctgccg cctgcctgcc 180
tgccactgag gggtcccagc accatgaggg cctggatctt ctttctcctt tgcctggccg 240
ggagggcctt ggcagcccct cagcaagaag ccctgcctga tgagacagag gtggtggaag 300
aaactgtggc agaggtgact gaggtatctg tgggagctaa tcctgtccag gtggaagtag 360
gagaatttga tgatggtgca gaggaaaccg aagaggaggt ggtggcggaa aatccctgcc 420
agaaccacca ctgcaaacac ggcaagggtg gcgagctgga tgagaacaac acccccatgt 480
gcgtgtgcca ggaccccacc agctgcccag ccccatagg cgagtttgag aaggtgtgca 540
gcaatgacaa caagaccttc gactcttcct gccacttctt tgccacaaag tgcaccctgg 600
agggcaccaa gaagggccac aagctccacc tggactacat cgggccttgc aaatacatcc 660
ccccttgctt ggactctgag ctgaccgaat tccccctgcg catgcgggac tggctcaaga 720
acgtcctggg caccctgtat gagaggggat aggacaacaa ccttctgact gagnaagcag 780
aagctgcggg tgaagaagat ccatgagaat gagaagcgcc tggaggcagg agaccacccc 840
gtggagctgc tggcccggga cttcgagaag aactataaca tgtacatctt ccctgtacac 900
tggcagttcg gccagctgga ccagcaccac attgacgggt acctctccca caccgagctg 960
gctccactgc gtgctccctt catcccatg gagcattgca ccacccggtt tttcgagacc 1020
gtgacctgg                                     1029

```

```

<210> 53
<211> 985
<212> DNA
<213> Homo sapiens

```

```

<400> 53
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tgtccatcgt gctgaggggtg tgaccgcaag aggggtgaaaa cttccagcca actttctcag 180
tcctttctct tgcgagaggg aagccacctg ctatacaaac taatacccc tgcttgacc 240
ccttccccac gactcagttg acagaaggat atactttgtt ataacttatt atttgttct 300
ctgtaaatac aagatgttta taggaaatat gtattctgaa ctctatctgc agaatgagtc 360
actacaccaa aatagttcta ttatttagaa tgtgttaatt ttaaagggac ctgataggta 420
tttatttaca tatgcgatcc acatttgtgt gaaagcatgt gatcatacta acccagcctc 480
ctggaatgtc gctgtacgat gattgatgtc tttttctcag tccatagtta caattgttta 540
gtatgctaata cagtccagtt ccctgagggt taagatcaaa tataaattac tctgcttttc 600
gactcattca ggtagcattg tacctgaacc tgattgctac tttttcatct taaatattat 660
atttctcat ctaatctgcc ttccctcat ccacagacat ttggagaagg aaatgggagg 720
gtgtctgtta tccctttctc tttgctttgt ccccgttgtt agactggcag cgtcagttgc 780
tcgggtgggtc tgggttagagc cgtgggtgag gcagggtggc ggcgggggaca gggagaggct 840
gagaggggaag tgggtggcatt tactgctctg acacttccac tgtccctgct ggggatgctg 900
gggccaaggc ctgtggggcc tgtgaactgc acagccagga gcaaggaacc cactaaatac 960
tccgtcactg catgtccctt ctaca                                     985

```

```

<210> 54
<211> 622
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> modified_base
<222> (622)
<223> a, t, c or g

```

```

<400> 54
atgtttttca ttttttcat gttatctatc caagcactgt tccatgggtca gcaagtcata 60

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tttcataatg tggattttcc aaaataatta ttgaatacag ctattctatg gctactttta 120
gtgtttttgt ggtatgtggt gtgggagtgt ttatggaatt accagtatct taaattttca 180
aaggaacctt ggaagtctat cactctaaat gaaagtctgt cactctacat gaattatgtg 240
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gagagtttct agtttaaatgg gttaaatttt tgtgttgca atagtaagtt tagtcttctt 360
ataatatatt taaatgaaaa atcataggta tttgttacca tgtgtgaaga ttactttgtt 420
aaaagcaaaa gtggtcgtgt gatatgctaa atgttaatta ctgattttat atgtttaaat 480
cacgccaaac aaattatgtc tgtgccatcc agggctctgtt gttaatcttt ttctgagtac 540
ttggattggg ataaagggct tgtactatgc actttttatt aatgaataaa tagaaaacgt 600
tagtaacaaa aaaaaaaaaa an 622

```

<210> 55

<211> 1129

<212> DNA

<213> Homo sapiens

<400> 55

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gatttttatt tagaaactat atttacttaa acccccctca ggaaagaggt tttaaaatca 60
aagatgggaa aatcgagaa aattgccctt ccccatggcc agcttggtca tggatatacac 120
ttgtatgagc aaccaaagat aaacagacag aaaagcaaat ataacttgcc actaaccaag 180
atcacctctg caaaaagaaa tgaaaacaac ttttggcagg attctgtttc atctgacaga 240
attcagaagc agggaaaaaa gcctttttaa aataccgaga acattaaaaa ttcgcatttg 300
aagaaatcag cattttctaac tgaagtgagc caaaaggaaa attatgctgg ggcaaagtgt 360
agtgatccac cttctcctag tgttcttcca aagcctccta gtcactggat gggaaagcact 420
gttgaaaatt ccaacccaaa caggagctg atggcagtag acttaaaaaac gctcctcaaa 480
gttcaaactt agatttcaga tttcagtagt tgtgtaaaac ataatttttc ccataatccct 540
ggactcttga gaaaattggg acagaaatgg aaatttgcct tgttgcaaca tacaattgca 600
aaagatgagt ttaaaaaatt acatacaaac agcttgtatt atattttata ttttgtaaat 660
actgtatacc atgtattatg tgtatattgt tcatacttga gaggtatatt atagttttgt 720
tatgaaagta tgtattttgc cctgcccaca ttgcagggtgt tttgtatata tacaatggat 780
aaattttaag tgtgtgctaa ggcacatgga agaccgattt tatttgcaca aggtactgag 840
atttttttca agaaacagct gtcaaatctc aagggtgaaga tctaaatgtg aacagtttac 900
taatgcacta ctgaagttaa aatctgtggc acaatcaatg taagcatggg gtttgtttct 960
ctaaattgat ttgtaatctg aaattactga acaactccta ttcccatttt tgctaaactc 1020
aatttctggg tttgggtatat atccattcca gcttaatgcc tctaatttta atgccaacaa 1080
aattggttgt aatcaaattt taaaataata ataattgggg cccccctt 1129

```

<210> 56

<400> 56

000

<210> 57

<400> 57

000

<210> 58

<211> 877

<212> DNA

<213> Homo sapiens

<400> 58

```

cacactgagg gtttttaaca ccattctccc ccacttctct cctgggtgac ataagagaga 60

```

```

aataacctgt agtacagcag ctaaagtatt ctcctttcag agaatttttt tggaggtctc 120
taatatatat tcccccttg tctctgtgat ctcttattta tactatatta ttgtcccatg 180
tacttttctaa actgagcttg gaacatttag tattcctgca attggacttc ccacttaaca 240
attatacaga ctttgctttt agaaatagat taggttccaa acagaaagtt caagtgtaac 300
aacaacaata aaaatagatt atgaaacagg ctataattgg ctcttttgga tttgataggg 360
gcaagatgaa aggcaacttt cttgcttttg aaatcatgtt gggtaagagg taaggaatcc 420
agctacaatt ttattagtgc ttgaaacggg cttccttgaa ttctccaggc cctatcattt 480
ttttttttct tactaatcag aagagagctg gggtagaagc cccatgtttg tattccatga 540
aacacgtcgg gttggagtaa aggcaaaaac agctagacac accaggtgtg tctgtttgac 600
atttataagc tggcactcat caacactcct gtttctcctt tctctgggac gtgtggatta 660
aggggtgtga gttgtgggaa gaattgccct cgtacctcct ggatttatta tttttctcaa 720
ataccaacca gtaagatccc aaataacttg agaaaaattg tttcctgac tgtccacttc 780
tgggtgtcaaa gattttactc atcttcttag tacattctat gtattttata tgtataattt 840
tatacaatta aaaatagatt tttgtctagt gaaaaaaa 877

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<210> 59

<211> 1329

<212> DNA

<213> Homo sapiens

<400> 59

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gtcgggggagc gcggggccgg ggcccagggg accccggggc acggagagcg ggaagaggat 60
ggattgcccc gccctcccc ccggatggaa gaaggaggaa gtgatccgaa aatctgggct 120
aagtgtcggc aagagcgatg tctactactt cagtccaagt ggtaagaagt tcagaagcaa 180
gcctcagttg gcaagggtacc tgggaaatac tgttgatctc agcagttttg acttcagaac 240
tggaaagatg atgcctagta aattacagaa gaacaaacag agactgcgaa acgatcctct 300
caatcaaaat aagggtaaac cagacttgaa tacaacattg ccaattagac aaacagcatc 360
aattttcaaa caaccggtaa ccaaagtcac aaatcatcct agtaataaag tgaaatcaga 420
cccacaacga atgaatgaac agccacgtca gcttttctgg gagaagaggc tacaaggact 480
tagtgcacga gatgtaacag aacaaattat aaaaaccatg gaactacca aaggtcttca 540
aggagtgggt ccaggtagca atgatgagac ctttttatct gctgttgcca gtgctttgca 600
cacaagctct gcgccaatca cagggcaagt ctccgctgct gtggaaaaga accctgctgt 660
ttggcttaac acatctcaac ccctctgcaa agctttttatt gtcacagatg aagacatcag 720
gaaacaggaa gagcgagtac agcaagtacg caagaaattg gaagaagcac tgatggcaga 780
catcttgctg cgagctgctg atacagaaga gatggatatt gaaatggaca gtggagatga 840
agcctaagaa tatgatcagg taactttcga ccgactttcc ccaagagaaa attcctagaa 900
attgaacaaa aatgtttcca ctggcttttg cctgtaagaa aaaaaatgta cccgagcaca 960
tagagctttt taatagcact aaccaatgcc ttttttagatg tatttttgat gtatatatct 1020
attattcaaa aaatcatgtt tattttgagt cctaggactt aaaattagtc ttttgtaata 1080
tcaagcagga ccctaagatg aagctgagct tttgatgcca ggtgcaatct actggaatg 1140
tagcacttac gtaaaacatt tgtttcccc acagttttta taagaacaga tcaggaattc 1200
taaataaatt tcccagttaa agattattgt gacttcactg tatataaaca tattttttata 1260
ctttattgaa aggggacacc tgtacattct tccatcatca ctgtaaagac aaataaatga 1320
ttatattca 1329

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<210> 60

<211> 697

<212> DNA

<213> Homo sapiens

<400> 60

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gtaggcgcta gtctgggcgc agaggtttct gggagccaag agtggtaatg gcgtctgtat 60
gatcttcgga gcctgctgca tcggacctcg gccagtcata aaagatgaca acagcagcca 120
ggccaacctt tgaacctgcc agagggtggaa ggggaaaagg agaaggtgat ttgagccaac 180
tttcaaagca gtattcaagc agagacctac cctctcatat aaagataaaa tacagacaga 240
ctactcagga tgcccctgaa gaggttcgta accgtgactt caggagagag ttggaagaaa 300

```

```

gagagagagc tgctgcaaga gagaaaaata gggatcgtcc aacccgagaa catacaacct 360
cctcttcagt gtcaaaaaaag ccacgggttag accagattcc tgccgccaac cttgatgcag 420
atgaccctct aacagatgag gaagatgaag attttgaaga agaaagtgat gatgatgata 480
ctgcagctct tcttgcagaa ctggaaaaaa ttaaaaaaga aagagctgaa aagggccaag 540
gcccagggaa gggaccaagg gccaaaaaag ctttaagggg gggaaggggt tcgttttggg 600
aaaacattgg ttgggcggga aaccctttcc ctttaatctt gagcttggcc cattccaagc 660
ttaaggccga ctttgaaaag tttgaaagga ggggtggg 697

```

```

<210> 61
<211> 1389
<212> DNA
<213> Homo sapiens

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<220>
<221> modified_base
<222> (810)
<223> a, t, c or g

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```

<400> 61
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gagcagagca gccatctttt aagtggggct gtatcaggct gggtttattt aaaagcaaca 180
aaatgttttg gttaagaaaa ttattttgct ttcagtgtaa atcttcgcag tgttctaaac 240
aaagttcagt cttctgctcg cccctttccc tcaactgatgt ctgcacttgg ttgaggtctc 300
ctggagcctc acaggctctg ctgttctcca cttctcacct gccatccacg ccctgcaagc 360
tcatgcaaac accctttctt cctcctgcgg cagagttggt caggttgcct gggcaggggc 420
ttaaacagtg ccagccccctg ccatcccaaa gctattgtta agccccccag gcgtcctcca 480
cccacgcccc ctagcctgcc atgtccacag ttccttgggc tgctgagggg ctagtgcagt 540
ggctcctgacc tctcttatca agagcacact tctttgctgg ttgctccttt tgagcatatg 600
cgtgtgatta tttggaacag ttagacttgc cacgttgggt cagttttaga aattgtttct 660
agctagaggg actggtgtcc ttccaagtct agcatttggg gtatggaaaa ttgttgtggt 720
gtgtggtagg gtttttgttt tcttttttga gtttttttc ccccttttagt ctctggctt 780
tttcccttcc cttcccttct ccactggccn agcttgggcc tcatcctcat gtcaccttc 840
taggaaggcg cctgccccat cttgtctgcc ggcagcatgc atccaaggcc agagctcagg 900
cctgcagact gggctggtgc ctctccgct tcagggtatg ggagttggtg aaggggcttt 960
caaaaaataa taagaaaaaa aaggtaaagt ctttggttagc ttctatccac tcagatcctg 1020
gaaggcagca aggttttgtg gatctagatt cattaggaat gtcttcttgt cagccaggcc 1080
aggaccggg cttgccaaga gcagaggccc tcccagcaac caggatacca ccactttggg 1140
ggctttgtgt acagaggtcc gggctcgaga cctcatagg tgcagaaatc tggggcagcc 1200
accatcaaga agccctctc aggggcagca actcctttgc cagcgtggat ttctcaagt 1260
gggactgcat aattaaagca gttgcagttt tatttttttt acagcttttt tcccaaaaat 1320
gatttgtagt tgtgtgtgca gcacttcgcc ctgatatgtg tgcctacaa taaaaaccaa 1380
atctaatat 1389

```

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<210> 62
<211> 535
<212> DNA
<213> Homo sapiens

```

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<400> 62
tgtattgagg taataaattg ttttactgac aatttttccct ttttctacac taaaacaata 60
tgtgatatat ttccctctct gaagaggcaa ttcattaaac tctcaaattt tctatagaat 120
caagatagaa cttttagata ctccaactca caaaaatgta aaaaaactaa caaaaatatt 180
tggctttcaa taatgctaaa tatctacatt tttagaattt atcaacattt aactagataa 240
ttgggcattg cttaattatg catgtactta tccatactaa taaaattgac aatgctagtg 300
catacttatt ggttttagtc tattatcagg atataatcat ctgtgaggag gatattcaaa 360

```

```

atactgtaaa tgataacagt taatgatata cacatthaga ctgagttgca cactggcagg 420
gagacaaaaa acattacttc catacttgtg tcatgattct tttttttttg agagagtctc 480
actctgtcgc caggctggga gtacagtggc atgatctcgg ctcactgcaa cctct 535

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<210> 63

<211> 1098

<212> DNA

<213> Homo sapiens

<400> 63

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gtgatttgac atttgaacaa attaggaagc tgaatcctgc agcaaaccac agactcagga 60
atgatttccc tgatgaaaaag atccctaccc taagggaagc tggtgcagag tgcctaaacc 120
ataacctcac aatcttcttt gatgtcaaaag gccatgcaca caaggctact gaggtctctaa 180
agaaaaatgta tatggaattt cctcaactgt ataataatag tgtggtctgt tctttcttgc 240
cagaagttat ctacaagatg agacaaacag atcgggatgt aataacagca ttaactcaca 300
gaccttggag cctaagccat acaggagatg ggaaaccacg ctatgatact ttctggaaac 360
atthttatatt tghtatgatg gacatthtgc tcgattggag catgcataat atcttgttgt 420
acctgtgtgg aatthtcagct ttcctcatgc aaaaggattt tgtatccccg gcctacttga 480
agaagtggtc agctaaaagga atccaggttg ttggttggac tghtaatacc tttgatgaaa 540
agagttacta cgaatcccat cttggttcca gctatatcac tgacagcatg gtagaagact 600
gcgaacctca cttctagact ttcacggtgg gacgaaacgg gttcagaaac tgccaggggc 660
ctcatacagg gatatacaaaa taccctttgt gctagcccag gccctgggga atcaggtgac 720
tcacacaaat gcaatagttg gtactgcat ttttacctga accaaagcta aacccggtgt 780
tgccaccatg caccatggca tgccagagtt caacactgtt gctcttgaaa atctgggtct 840
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ggataagcac agattgaatt gtacaatttg cagatgcaga tgtaaatgca tgggacatgc 960
atgataactc agagttgaca ttttaaaaact tgccacactt atthtcaaata tttgtactca 1020
gctatgttaa catgtactgt agacatcaaa cttgtggcca tactaataaa attaataaaa 1080
ggagcactaa aggaaaaa 1098

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<210> 64

<211> 1860

<212> DNA

<213> Homo sapiens

<400> 64

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taagatcctg actctgaagc ttcaaagtga cactgtggaa atctgaaacg aggggatgtc 60
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atgtctcatt tacagtataa aactcaaaagg tagatgtaat tthttacacct atgagtattt 180
gtccaatthc tgtctcttcc tcaccattgg gtatctattc tttatatgta aataagataa 240
ggtcatctga tagccttatt cagtcttcat catthttcatc attgttccta tgtagattat 300
tggaatthta ttgtagcact acataactga ttataaaaat ctgtaaatga attagcactt 360
tcataattgaa acaagcctgc tagcctatgt ataaaatagc aaaatgtttg ctgtttataa 420
aaagatgtaa tgggggtgggg ggcaggggta atthtcaagtt attaattthaa aaatgaacta 480
gcaatthtgt acctggtgac tttgtggtgc actcacctct gatagtgact tgaattcgggt 540
atgtaaaaag ggggttagtg tathttcattg ctgctaaaaa tgacaactcc ctctgtgtcc 600
tgtthttctt aaagctgtca gtgtacaagt ggggtatttg ataccagacc ttactgtaaa 660
aaataaaaaa ggtggtatct agagcatgta aattggatat aaagtctctgc tcttaaaagag 720
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ctattatgtc ttgatttgat tgcagthttt tctaattat aacaaattht tctctattgg 840
cctgtthttta atcctgtgcc tagaaggagt acaaaatgca cactthtcaa aattgatatt 900
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aactgcatgt tgaaaaataa gccgttattg atcttaaca tgggtcagat gagtcatata 1140
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atggattcaa aactattaca agctgttgct taaaacaggt gagaaaaaaa tttataactg 1260
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tgtttttctt gtataccaat aattaagcca ctactgttgg cactgtttgg ttttctatct 1380
taacactgaa ggagtgaaag tatttcctat atttatgaat ttactactaa aatcttggca 1440
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cagaggggaa ataatgaata gtattaaaga aacattctcg tcttccttta cctttaatcc 1680
cctaatacct agtctacttt ttaaattttc agacttcact gctttttgaa ttcataatcc 1740
taattttcac attattgtta atggaaaatc atatctaata aagggttttag ttattcccat 1800
gcacagtatg aaaattctca tttgctgagg ttttgtttca agaaaatgta ttggcatgtc 1860

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<210> 65

<400> 65

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<210> 66

<211> 205

<212> PRT

<213> Homo sapiens

<400> 66

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Cys Arg Thr Trp Ser Ile Leu Arg Gly Arg Met Trp Leu Ser Thr Asn
  1              5              10              15
Ser Ala Ala Asp Ala Ile Asn Pro Trp Pro Gly Arg Ser Ser Arg Pro
      20              25              30
Arg Ser Arg Ala Ala Val Pro His Arg Leu Leu His Leu Pro Pro Val
      35              40              45
Cys Ala Glu Leu Gln Gly Gln Gln Phe Tyr Ser Leu Glu Gly Ala Pro
      50              55              60
Tyr Cys Glu Gly Cys Tyr Thr Asp Thr Leu Glu Lys Cys Asn Thr Cys
      65              70              75              80
Gly Glu Pro Ile Thr Asp Arg Met Leu Arg Ala Thr Gly Lys Ala Tyr
      85              90              95
His Pro His Cys Phe Thr Cys Val Val Cys Ala Arg Pro Leu Glu Gly
      100             105             110
Thr Ser Phe Ile Val Asp Gln Ala Asn Arg Pro His Cys Val Pro Asp
      115             120             125
Tyr His Lys Gln Tyr Ala Pro Arg Cys Ser Val Cys Ser Glu Pro Ile
      130             135             140
Met Pro Glu Pro Gly Arg Asp Glu Thr Val Arg Val Val Ala Leu Asp
      145             150             155             160
Lys Asn Phe His Met Lys Cys Tyr Lys Cys Glu Asp Cys Gly Lys Pro
      165             170             175

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Leu Ser Ile Glu Ala Asp Asp Asn Gly Cys Phe Pro Leu Asp Gly His  
 180 185 190

Val Leu Cys Arg Lys Cys His Thr Ala Arg Ala Gln Thr  
 195 200 205

<210> 67

<211> 150

<212> PRT

<213> Homo sapiens

<400> 67

Ala Ala Arg Ala Leu Lys Arg Pro Phe Pro Ser Gly Pro Pro Leu Arg  
 1 5 10 15

Asp Arg Ser Pro Ser Leu Glu Ser Gln Ser Arg Lys Thr Pro Arg Leu  
 20 25 30

Pro Glu Asp Leu Ala Ser Gly Lys Lys Asp Tyr Thr Phe Gln Arg Pro  
 35 40 45

Leu Arg Arg Arg Asp Arg Lys Arg Arg Ala Ser Arg Val Ser Leu Arg  
 50 55 60

Val Asp Pro Ser Asp His Gly Gly Pro Gly Val Val Ala Asp Glu Val  
 65 70 75 80

Pro His Gln Gly Lys Cys Gly Trp Gly Arg Arg Leu Pro Gly Val Arg  
 85 90 95

Pro Gly Ala Ala Gly Ala Gln Arg Gln Glu Pro Gly Ser Pro Thr Glu  
 100 105 110

Gly Trp Gly Gly Gly Pro Pro Arg His Val Pro Val Gln Pro Val Arg  
 115 120 125

Val Ser Ala Asp Arg Pro Ala Asp Thr Pro Ala Pro Ser Pro Ser Lys  
 130 135 140

Asp Leu Leu Ser His Pro  
 145 150

<210> 68

<211> 55

<212> PRT

<213> Homo sapiens

<400> 68

Leu Leu Glu Cys Arg His His Asp Gly Asp Val Ser Ser Val Gly Gly  
 1 5 10 15

Pro Leu Gln Gly Pro Arg Val Leu Gln Gly Gly Leu Gly Val Cys Glu  
 20 25 30

Gly Ala His Gln Val Ala Ser Gln Gln Gly Arg Leu Pro Arg Pro Glu  
 35 40 45



Arg Ala Gly Leu Pro Leu Thr  
 50 55

<210> 69  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

<400> 69  
 Ser Val His Phe Pro Ala Ala Leu Arg Cys Glu Thr Ala Ala Leu Leu  
 1 5 10 15  
 Trp Ser Leu Arg Ala Ala Arg His His Asp Ser Gln Arg Thr Leu Arg  
 20 25 30  
 Arg Ala Arg Lys Thr Thr Pro Ser Arg Gly Leu Cys Gly Ala Ala Thr  
 35 40 45  
 Gly Ser Gly Gly Arg Ala Glu Cys Pro Cys Ala Trp Ile Arg Ala Thr  
 50 55 60  
 Met Val Ala Arg Val Trp Ser Leu Met Arg Phe Leu Ile Lys Gly Ser  
 65 70 75 80  
 Val Ala Gly Gly Ala Val Tyr Leu Val Tyr Asp Gln Glu Leu Leu Gly  
 85 90 95  
 Pro Ser Asp Lys Ser Gln Ala Ala Leu Gln Lys Ala Gly Glu Val Val  
 100 105 110  
 Pro Pro Ala Met Tyr Gln Phe Ser Gln Tyr Val Cys Gln Gln Thr Gly  
 115 120 125  
 Leu Gln Ile Pro Gln Leu Pro Ala Pro Pro Lys Ile Tyr Phe Pro Ile  
 130 135 140  
 Arg Asp Ser Trp Asn Ala Gly Ile Met Thr Val Met Ser Ala Leu Ser  
 145 150 155 160  
 Val Ala Pro Ser Lys Ala Arg Glu Tyr Ser Lys Glu Gly Trp Glu Tyr  
 165 170 175  
 Val Lys Ala Arg Thr Lys  
 180

<210> 70  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 70  
 Pro Glu Asp Ser Gly Leu Gly Pro His Ser Glu Gly Arg Pro Pro Asp  
 1 5 10 15

Cys Arg Pro Asn Lys Gly Leu Gln Lys  
                   20                                  25

<210> 71  
 <211> 56  
 <212> PRT  
 <213> Homo sapiens

<400> 71  
 Asp Glu Lys Asn Thr Ser Phe Leu Tyr Ser Asp Val Gly Ala Thr Ser  
   1                                  5                                  10                                  15  
 Met Lys Ser Val Leu Tyr Glu Ser Tyr Thr Lys Met Gly Arg His Leu  
                                   20                                  25                                  30  
 Val Asn Cys Ala Arg Tyr Leu Lys Cys Met Phe Arg Lys Ala Phe Tyr  
                                   35                                  40                                  45  
 Gln Leu Arg Asn Met Thr Tyr Phe  
                                   50                                  55

<210> 72

<400> 72  
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<210> 73  
 <211> 291  
 <212> PRT  
 <213> Homo sapiens

<400> 73  
 Leu Glu Arg Leu Val Asp Ile Lys Lys Gly Asn Thr Leu Leu Leu Gln  
   1                                  5                                  10                                  15  
 His Leu Lys Arg Ile Ile Ser Asp Leu Cys Lys Leu Tyr Asn Leu Pro  
                                   20                                  25                                  30  
 Gln His Pro Asp Val Glu Met Leu Asp Gln Pro Leu Pro Ala Glu Gln  
                                   35                                  40                                  45  
 Cys Thr Gln Glu Asp Val Ser Ser Glu Asp Glu Asp Glu Glu Met Pro  
                                   50                                  55                                  60  
 Glu Asp Thr Glu Asp Leu Asp His Tyr Glu Met Lys Glu Glu Glu Pro  
   65                                  70                                  75                                  80  
 Ala Glu Gly Lys Lys Ser Glu Asp Asp Gly Ile Gly Lys Glu Asn Leu  
                                   85                                  90                                  95  
 Ala Ile Leu Glu Lys Ile Lys Lys Asn Gln Arg Gln Asp Tyr Leu Asn  
                                   100                                  105                                  110  
 Gly Ala Val Ser Gly Ser Val Gln Ala Thr Asp Arg Leu Met Lys Glu  
                                   115                                  120                                  125

Leu Arg Asp Ile Tyr Arg Ser Gln Ser Phe Lys Gly Gly Asn Tyr Ala  
 130 135 140  
 Val Glu Leu Val Asn Asp Ser Leu Tyr Asp Trp Asn Val Lys Leu Leu  
 145 150 155 160  
 Lys Val Asp Gln Asp Ser Ala Leu His Asn Asp Leu Gln Ile Leu Lys  
 165 170 175  
 Glu Lys Glu Gly Ala Asp Phe Ile Leu Leu Asn Phe Ser Phe Lys Asp  
 180 185 190  
 Asn Phe Pro Phe Asp Pro Pro Phe Val Arg Val Val Ser Pro Val Leu  
 195 200 205  
 Ser Gly Gly Tyr Val Leu Gly Gly Gly Ala Ile Cys Met Glu Leu Leu  
 210 215 220  
 Thr Lys Gln Gly Trp Ser Ser Ala Tyr Ser Ile Glu Ser Val Ile Met  
 225 230 235 240  
 Gln Ile Ser Ala Thr Leu Val Lys Gly Lys Ala Arg Val Gln Phe Gly  
 245 250 255  
 Ala Asn Lys Ser Gln Tyr Ser Leu Thr Arg Ala Gln Gln Ser Tyr Lys  
 260 265 270  
 Ser Leu Val Gln Ile His Glu Lys Asn Gly Trp Tyr Thr Pro Pro Lys  
 275 280 285  
 Glu Asp Gly  
 290  
  
 <210> 74  
 <211> 253  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 74  
 Arg Ser Val Val Arg Arg Cys Leu Lys Met Ala Ala Glu Glu Pro Gln  
 1 5 10 15  
 Gln Gln Lys Gln Glu Pro Leu Gly Ser Asp Ser Glu Gly Val Asn Cys  
 20 25 30  
 Leu Ala Tyr Asp Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln  
 35 40 45  
 Glu Ile Ala Val Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser  
 50 55 60  
 Val Leu Tyr Lys Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys  
 65 70 75 80  
 Ile Lys Asp Leu His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro  
 85 90 95

Asp Gly Asn Cys Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala  
 100 105 110

Leu Leu Asp Asp Ser Lys Glu Leu Gln Arg Phe Lys Ala Val Ser Ala  
 115 120 125

Lys Ser Lys Glu Asp Leu Val Ser Gln Gly Phe Thr Glu Phe Thr Ile  
 130 135 140

Glu Asp Phe His Asn Thr Phe Met Asp Leu Ile Glu Gln Val Glu Lys  
 145 150 155 160

Gln Thr Ser Val Ala Asp Leu Leu Ala Ser Phe Asn Asp Gln Ser Thr  
 165 170 175

Ser Asp Tyr Leu Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu  
 180 185 190

Gln Arg Glu Ser Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr  
 195 200 205

Val Lys Glu Phe Cys Gln Gln Glu Val Glu Pro Met Cys Lys Glu Ser  
 210 215 220

Asp His Ile His Ile Ile Ala Leu Ala Gln Ala Leu Ser Val Ser Ile  
 225 230 235 240

Gln Val Glu Tyr Met Asp Arg Gly Glu Gly Gly Thr Thr  
 245 250

<210> 75

<211> 108

<212> PRT

<213> Homo sapiens

<400> 75

Glu Lys Phe Leu Asn Met Gly Ala Pro Leu Gly Val Gly Leu Gly Leu  
 1 5 10 15

Val Phe Val Ser Ser Ile Gly Ile Tyr Val Ser Ser Thr Tyr Pro Pro  
 20 25 30

Val Ala Gly Ala Thr Leu Tyr Ser Val Ala Met Tyr Gly Gly Leu Val  
 35 40 45

Leu Phe Ser Met Phe Leu Leu Tyr Asp Thr Gln Lys Val Ile Lys Arg  
 50 55 60

Ala Glu Val Ser Pro Met Tyr Gly Val Gln Lys Tyr Asp Pro Ile Asn  
 65 70 75 80

Ser Met Leu Ser Ile Tyr Met Asp Thr Leu Asn Ile Phe Met Arg Val  
 85 90 95

Ala Thr Met Leu Ala Thr Gly Gly Asn Arg Lys Lys  
 100 105

&lt;210&gt; 76

<400> 76  
000

&lt;210&gt; 77

<400> 77  
000

&lt;210&gt; 78

<400> 78  
000

&lt;210&gt; 79

<400> 79  
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&lt;210&gt; 80

<400> 80  
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&lt;210&gt; 81

<400> 81  
000

&lt;210&gt; 82

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 82

Met	His	Arg	Asp	Ser	Cys	Pro	Leu	Asp	Cys	Lys	Val	Tyr	Val	Gly	Asn
1				5					10					15	

Leu	Gly	Asn	Asn	Gly	Asn	Lys	Thr	Glu	Leu	Glu	Arg	Ala	Phe	Gly	Tyr
		20						25					30		

Tyr	Gly	Pro	Leu	Arg	Ser	Val	Trp	Val	Ala	Arg	Asn	Pro	Pro	Gly	Phe
		35					40					45			

Ala	Phe	Val	Glu	Phe	Glu	Asp	Pro	Arg	Asp	Ala	Ala	Asp	Ala	Val	Arg
	50					55					60				

Glu	Leu	Asp	Gly	Arg	Thr	Leu	Cys	Gly	Cys	Arg	Val	Arg	Val	Glu	Leu
65					70					75					80



Ala Val Pro Gly  
145

<210> 84

<400> 84  
000

<210> 85

<400> 85  
000

<210> 86

<400> 86  
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<210> 87

<400> 87  
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<210> 88

<400> 88  
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<210> 89

<400> 89  
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<210> 90

<211> 145

<212> PRT

<213> Homo sapiens

<400> 90

Glu Asp Gly Ala Asp Gly Ala Phe Tyr Pro Asp Glu Ile Gln Arg Pro  
1 5 10 15

Pro Val Arg Val Pro Ser Trp Gly Leu Glu Asp Asn Val Val Cys Ser  
20 25 30

Gln Pro Ala Arg Asn Phe Ser Arg Pro Asp Gly Leu Glu Asp Ser Glu  
35 40 45

Asp Ser Lys Glu Asp Glu Asn Val Pro Thr Ala Pro Asp Pro Pro Ser  
50 55 60

Gln His Leu Arg Gly His Gly Thr Gly Phe Cys Phe Asp Ser Ser Phe  
 65 70 75 80  
 Asp Val His Lys Lys Cys Pro Leu Cys Glu Leu Met Phe Pro Pro Asn  
 85 90 95  
 Tyr Asp Gln Ser Lys Phe Glu Glu His Val Glu Ser His Trp Lys Val  
 100 105 110  
 Cys Pro Met Cys Ser Glu Gln Phe Pro Pro Asp Tyr Asp Gln Gln Val  
 115 120 125  
 Phe Glu Arg His Val Gln Thr His Phe Asp Gln Asn Val Leu Asn Phe  
 130 135 140  
 Asp  
 145

<210> 91  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

<400> 91  
 Asp Lys Ser Ser Ala Cys Arg Arg Asn Gly Asn Tyr Ser Asp Glu Lys  
 1 5 10 15  
 Lys Asp Ala Met Tyr Trp Glu Lys Arg Arg Lys Asn Asn Glu Ala Ala  
 20 25 30  
 Lys Arg Ser Arg Glu Lys Arg Arg Leu Asn Asp Leu Val Leu Glu Asn  
 35 40 45  
 Lys Leu Ile Ala Leu Gly Glu Glu Asn Ala Thr Leu Lys Ala Glu Leu  
 50 55 60  
 Leu Ser Leu Lys Leu Lys Phe Gly Leu Ile Ser Ser Thr Ala Tyr Ala  
 65 70 75 80  
 Gln Glu Ile Gln Lys Leu Ser Asn Ser Thr Ala Val Tyr Phe Gln Asp  
 85 90 95  
 Tyr Gln Thr Ser Lys Ser Asn Val Ser Ser Phe Val Asp Glu His Glu  
 100 105 110  
 Pro Ser Met Val Ser Ser Ser Cys Ile Ser Val Ile Lys His Ser Pro  
 115 120 125  
 Gln Ser Ser Leu Ser Asp Val Ser Glu Val Ser Ser Val Glu His Thr  
 130 135 140  
 Gln Glu Ser Ser Val Gln Gly Ser Cys Arg Ser Pro Glu Asn Lys Phe  
 145 150 155 160  
 Gln Ile Ile Lys Gln Glu Pro Met Glu Leu Glu Ser Tyr Thr Arg Glu  
 165 170 175



Pro Arg Asp Asp Arg Gly Ser Tyr Thr Ala Ser Ile Tyr Gln Asn Tyr  
 180 185 190

Met Gly Asn Ser Phe Ser Gly Tyr Ser His Ser Pro Pro Leu Leu Gln  
 195 200 205

Val Asn Arg Ser Ser Ser Asn Ser Pro Arg Thr Ser Glu Thr Asp Asp  
 210 215 220

Gly Val Val Gly Lys Ser Ser Asp Gly Glu Asp Glu Gln Gln Val Pro  
 225 230 235 240

Lys Gly Pro Ile His Ser Pro Val Glu Leu Lys His Val His Ala Thr  
 245 250 255

Val Val Lys Val Pro Glu Val Asn Ser Ser Ala Leu Pro His Lys Leu  
 260 265 270

Arg Ile Lys Ala Lys Ala Met Gln Ile Lys  
 275 280

<210> 92  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 92  
 Met Ala Ser Leu Gly His Ile Leu Val Phe Cys Val Gly Leu Leu Thr  
 1 5 10 15

Met Ala Lys Ala Glu Ser Pro Lys Glu His Asp Pro Phe Thr Tyr Asp  
 20 25 30

Tyr Gln Ser Leu Gln Ile Gly Gly Leu Val Ile Ala Gly Ile Leu Phe  
 35 40 45

Ile Leu Gly Ile Leu Ile Val Leu Ser Arg Arg Cys Arg Cys Lys Phe  
 50 55 60

Asn Gln Gln Gln Arg Thr Gly Glu Pro Asp Glu Glu Glu Gly Thr Phe  
 65 70 75 80

Arg Ser Ser Ile Arg Arg Leu Ser Thr Arg Arg Arg  
 85 90

<210> 93  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 93  
 Trp Thr Gly Thr Gly Arg Gly Ala Val Ala Ile Met Ala Asp Pro Asp  
 1 5 10 15

Pro Arg Tyr Pro Arg Ser Ser Ile Glu Asp Asp Phe Asn Tyr Gly Ser  
 20 25 30

Ser Val Ala Ser Ala Thr Val His Ile Arg Met Ala Phe Leu Arg Lys  
                   35                                  40                                  45

Val Tyr Ser Ile Leu Ser Leu Gln Val Leu Leu Thr Thr Val Thr Ser  
           50                                  55                                  60

Thr Val Phe Leu Tyr Phe Glu Ser Val Arg Thr Phe Val His Glu Ser  
       65                                  70                                  75                                  80

Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly Ser Leu Gly Leu Ile Phe  
                                   85                                  90                                  95

Ala Leu Thr Leu Asn Arg His Lys Tyr Pro Leu Asn Leu Tyr Leu Leu  
                   100                                  105                                  110

Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr Val Ala Val Val Val Thr  
           115                                  120                                  125

Ser Met Met Tyr Ile Leu Ser Ala Ser Phe His Thr  
       130                                  135                                  140

<210> 94

<400> 94  
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<210> 95

<400> 95  
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<210> 96

<400> 96  
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<210> 97

<211> 51

<212> PRT

<213> Homo sapiens

<400> 97

Phe Phe Pro Leu Leu Leu Pro Leu His Thr Pro Val Ala Gly Arg Asn  
       1                                  5                                  10                                  15

Leu Gly Phe Pro Glu Ser Leu Gly Val Pro Pro Phe Leu Pro His Pro  
                   20                                  25                                  30

Gly Gly Thr Pro Arg Ala Pro Gly Leu Phe Leu Leu Leu Phe Ser Phe  
           35                                  40                                  45

Trp Ala Val  
       50

<210> 98  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<400> 98  
 Phe Phe Leu Tyr Ser Phe Pro Phe Thr Pro Pro Trp Leu Glu Gly Thr  
   1                  5                  10                  15  
 Ser Ala Ser Leu Lys Ala Trp Gly Ser His Pro Ser Tyr Pro Thr Arg  
                   20                  25                  30  
 Glu Glu Arg Pro Gly Pro Arg Ala Cys Phe Ser Ser Cys Phe Pro Phe  
                   35                  40                  45  
 Gly Gln Phe Asp His  
           50

<210> 99  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

<400> 99  
 Pro Leu Asp Cys Ala Thr Phe Val Phe Val Phe Leu Asn Phe Phe Lys  
   1                  5                  10                  15  
 Pro Arg Met Ile Ser Pro Ala Ser Phe Ser Ser Pro Ser Ser Gln Thr  
                   20                  25                  30  
 Glu Phe Lys Gly His Phe Ser Ser Ser Phe Trp His Leu Gln Pro Gln  
                   35                  40                  45  
 Ser Gly Ile Phe  
           50

<210> 100  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 100  
 Pro Phe Ser Ser Ser Val Ser Phe Phe Gly Thr Ala Pro Ser Cys Leu  
   1                  5                  10                  15  
 Leu Glu Gly Trp Ile Leu Val Cys Ala Leu Asp Arg Tyr Arg Ile Asn  
                   20                  25                  30  
 Thr Cys Ala Leu Arg Thr Gly Ser Pro Arg Phe Ile Gln Ser Ala His  
                   35                  40                  45  
 Tyr Arg Lys Leu Leu Cys Gln Asn Pro Gly Lys Asp Pro Thr Pro Gly  
           50                  55                  60

Ser Pro Ser Ser Leu Leu Thr Ser Thr Arg Ala Val Leu Leu Phe Phe  
 65 70 75 80  
 Ile Leu Leu Phe Tyr Cys Phe Cys Cys Gly His Tyr His Trp Gln Ser  
 85 90 95  
 Ser Phe Ser Pro Phe Leu Asp Ile Gly Val Leu Ser Leu Lys Asp Ser  
 100 105 110  
 Thr Leu Arg Leu Lys Val Pro Lys Ala Ala  
 115 120

<210> 101  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 101  
 Leu Phe Phe Phe Cys Phe Leu Phe Trp Asp Cys Ala Ile Met Phe Ile  
 1 5 10 15  
 Arg Arg Leu Asp Phe Gly Val Cys Ser Arg Gln Ile Gln Asn Lys Tyr  
 20 25 30  
 Leu Arg Leu Glu Asn Arg Lys Ser Thr Ile His Thr Lys Cys Ser Leu  
 35 40 45  
 Gln Glu Val Ala Val Ser Lys Ser Arg Gln Gly Pro Asn Ser Gly Gln  
 50 55 60  
 Pro Leu Leu Pro Ala Asp Leu Asn Lys Gly Cys Ala Ile Val Phe Tyr  
 65 70 75 80  
 Phe Ile Ile Leu Leu Leu Leu Trp Ser Leu Ser Leu Ala Lys Phe  
 85 90 95  
 Leu Phe Pro Phe Pro Gly His Arg Gly Pro Val Phe Lys Arg Phe His  
 100 105 110  
 Ser Glu Ala Glu Gly Ala Lys Ser Cys Leu Arg Ser Gly Leu  
 115 120 125

<210> 102  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<400> 102  
 Ile Asp Phe Glu Gly Lys Glu Arg Gly Lys Gly Gln Gly Arg Asp Thr  
 1 5 10 15  
 Pro Pro Leu Pro Leu Ser Trp Ala Gln Lys Leu Gly Gly Gly Arg Glu  
 20 25 30  
 Arg Ile Phe Thr Phe Phe Lys Leu Leu Phe Ser Glu Trp Asn Lys Leu  
 35 40 45

Arg Ser Phe Ile Gln Lys Asn Ile Ser  
65 70

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<210> 103
<211> 143
<212> PRT
<213> Homo sapiens
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<400> 103  
Ile Leu Arg Gly Arg Arg Glu Gly Arg Val Arg Val Glu Thr Pro Leu  
1 5 10 15

Pro Cys Pro Phe Pro Gly Pro Arg Ser Trp Gly Glu Gly Gly Lys Gly  
20 25 30

Phe Leu His Phe Leu Asn Cys Tyr Phe Leu Asn Gly Thr Ser Trp Ala  
35 40 45

Lys Gly Pro Arg Pro Cys Pro Leu Ser Leu Thr Pro Leu Cys Ser Val  
50 55 60

His Ser Phe Lys Lys Thr Phe Leu Glu His Leu Leu Cys Pro Ala Tyr  
65 70 75 80

Ala Arg Pro Thr Ser Val Cys Val Gly Gly Leu Tyr Ala Ser Ser Ser  
85 90 95

Val Pro Pro Cys Pro Ser Phe Thr Gly Ala Phe Gly Gly Ser Val Gly  
100 105 110

Gly Gly Thr Phe Cys Gly Val Trp Gly Ser Pro Gly Ser Pro Thr Lys  
115 120 125

Leu Ser Pro Ser Pro Val Pro Thr His Leu Leu Gln Pro Pro Ala  
130 135 140

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<210> 104
<211> 116
<212> PRT
<213> Homo sapiens
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<400> 104  
Cys Arg Pro Thr Ile Phe Thr Pro Arg Pro Pro Ala Leu Gly Glu Gly  
1 5 10 15

Ser Thr Thr Thr Ser Pro Leu Asp Ile Pro Leu Gly Thr Gly Met Trp  
20 25 30

Val Pro Leu Thr Val Arg Pro Trp Gly Glu Pro Lys Ala Leu Thr Ser  
35 40 45

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<210> 105
<211> 22
<212> PRT
<213> Homo sapiens
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<210> 106

<210> 107

<210> 108

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<210> 109
<211> 165
<212> PRT
<213> Homo sapiens
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<400> 109  
Gly Ala Gly Pro Trp Glu Ala Phe Pro Asp Gly Ile Gly Arg Arg Ser  
1 5 10 15  
Arg Arg Ala Arg Leu Pro Gln Tyr Lys Arg Pro Pro Gly Gly Gly Gly  
20 25 30

Gly Gly Asp Ser Gly Arg Arg Asn Met Ala Val Ala Asp Leu Ala Leu  
                   35                                  40                                  45  
 Ile Pro Asp Val Asp Ile Asp Ser Asp Gly Val Phe Lys Tyr Val Leu  
                   50                                  55                                  60  
 Ile Arg Val His Ser Ala Pro Arg Ser Gly Ala Pro Ala Ala Glu Ser  
                   65                                  70                                  75                                  80  
 Lys Glu Ile Val Arg Gly Tyr Lys Trp Ala Glu Tyr His Ala Asp Ile  
                                   85                                  90                                  95  
 Tyr Asp Lys Val Ser Gly Asp Met Gln Lys Gln Gly Cys Asp Cys Glu  
                                   100                                  105                                  110  
 Cys Leu Gly Gly Gly Arg Ile Ser His Gln Ser Gln Asp Lys Lys Ile  
                                   115                                  120                                  125  
 His Val Tyr Gly Tyr Ser Met Ala Tyr Gly Pro Ala Gln His Ala Ile  
                                   130                                  135                                  140  
 Ser Thr Glu Lys Ile Lys Ala Lys Tyr Pro Asp Tyr Glu Val Thr Trp  
                                   145                                  150                                  155                                  160  
 Ala Asn Asp Gly Tyr  
                                   165

<210> 110

<400> 110  
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<210> 111  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 111  
 Pro Ser Ser Pro Ser Leu Pro Val Leu Arg Ala Gly Leu Arg Pro Phe  
           1                                  5                                  10                                  15  
 Cys Asp Val Leu Pro Gly Cys Gly Cys Val Arg Phe Leu Cys Ser Cys  
                                   20                                  25                                  30

Leu

<210> 112  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 112  
 Glu Thr Cys Ala Gly Ala Gly Arg Cys Ala Ala Asp Gly Gly Asn Gly  
           1                                  5                                  10                                  15

Ser Gly Ser Arg Val Pro Pro Ala Ser Arg Cys Cys Ala Leu Gly  
                   20                  25                  30

<210> 113  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 113  
 Lys Arg Ala Gln Ala Pro Ala Ala Ala Leu Gln Met Ala Glu Met Asp  
   1                  5                  10                  15  
 Pro Val Ala Glu Phe Pro Gln Pro Pro Gly Ala Ala Arg Trp Ala Glu  
                   20                  25                  30  
 Ala Leu Leu Arg Cys Phe Thr Trp Leu Arg Leu Cys Gln Ile Ser Met  
                   35                  40                  45  
 Phe Leu Ser Leu Lys Cys Leu Asn Thr Arg Ser Ser His Leu Gly Ala  
                   50                  55                  60  
 His Cys Arg  
   65

<210> 114  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens

<400> 114  
 Gly Cys Val Ala Gly Ser Ala Gly Leu Ser Arg Lys Ser Pro Trp Thr  
   1                  5                  10                  15  
 Glu Val Glu Thr Glu Thr Phe Leu Gly Ser Pro Arg Tyr Ser Arg Arg  
                   20                  25                  30  
 Val Arg Ser Cys Tyr Trp Leu Leu Gly Leu Met Ala Val Arg Ala Ser  
                   35                  40                  45  
 Phe Glu Asn Asn Cys Glu Ile Gly Cys Phe Ala Lys Leu Thr Asn Thr  
                   50                  55                  60  
 Tyr Cys Leu Val Ala Ile Gly Gly Ser Glu Asn Phe Tyr Ser Val Phe  
   65                  70                  75                  80  
 Glu Gly Glu Leu Ser Asp Thr Ile Pro Val Val His Ala Ser Ile Ala  
                   85                  90                  95  
 Gly Cys Arg Ile Ile Gly Arg Met Cys Val Gly Asn Arg His Gly Leu  
                   100                  105                  110  
 Leu Val Pro Asn Asn Thr Thr Asp Gln Glu Leu Gln His Ile Arg Asn  
                   115                  120                  125



Ser Leu Pro Asp Thr Val Gln Ile Arg Arg Val Glu Glu Arg Leu Ser  
 130 135 140  
 Ala Leu Gly Asn Val Thr Thr Cys Asn Asp Tyr Val Ala Leu Val His  
 145 150 155 160  
 Pro Asp Leu Asp Arg Glu Thr Glu Glu Ile Leu Ala Asp Val Leu Lys  
 165 170 175  
 Val Glu Val Phe Arg Gln Thr Val Ala Asp Gln Val Leu Val Gly Ser  
 180 185 190  
 Tyr Cys Val Phe Ser Asn Gln Gly Gly Leu Val His Pro Lys Thr Ser  
 195 200 205  
 Ile Glu Asp Gln Asp Glu Cys Leu Ser Phe Gln Val Pro Cys Cys Gly  
 210 215 220  
 Asp Val Asn Glu Ala Leu Ser Asp Ser Trp Asp Val Tyr Asn Val Ser  
 225 230 235 240  
 Phe Val Pro Glu Thr Thr  
 245

<210> 115

<400> 115  
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<210> 116  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 116  
 Met Gly Tyr Asn Leu Ser Pro Gln Phe Thr Gln Leu Leu Val Ser Arg  
 1 5 10 15  
 Tyr Cys Pro Arg Ser Ala Asn Pro Ala Met Gln Leu Asp Arg Phe Ile  
 20 25 30  
 Gln Val Cys Thr Gln Leu Gln Val Leu Thr Glu Ala Phe Arg Glu Lys  
 35 40 45  
 Asp Thr Ala Val Gln Gly Asn Ile Arg Leu Ser Phe Glu Asp Phe Val  
 50 55 60  
 Thr Met Thr Ala Ser Arg Met Leu  
 65 70

<210> 117  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 117

Glu His Thr His Arg Cys Ser Asp Gln Leu Arg Leu Ala Thr Val Ser  
 1 5 10 15

Asn Ser Val Ala Ser Lys Arg Glu Val Tyr Leu Cys Pro Ala Ile Gly  
 20 25 30

His Leu Gly  
 35

&lt;210&gt; 118

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 118

Ala Thr Leu Trp Leu Ala Lys Glu Lys Phe Ile Cys Ala Gln Pro Leu  
 1 5 10 15

Val Thr Leu Gly Asp Ala Pro Asp Ser Arg Gln Met Leu Val His Trp  
 20 25 30

Pro Ser Ser Ser Phe Leu Leu Lys  
 35 40

&lt;210&gt; 119

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 119

Gln Lys Arg Ser Leu Phe Val Pro Ser His Trp Ser Pro Trp Val Met  
 1 5 10 15

His Gln Ile Ala Gly Arg Cys Trp Phe Ile Gly Leu Arg Pro Leu Ser  
 20 25 30

Ser

&lt;210&gt; 120

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 120

Leu Ser Ser Ser Arg Ser Phe Ile Ser Thr Ser Trp Gly Ala Phe Val  
 1 5 10 15

Phe Phe Cys Leu Leu Ser Cys Gly Ser Leu Val Leu Ala Gly Phe Glu  
 20 25 30

Gly Ala Ser Thr Ser Met Ala Val Phe Ser Phe Trp Ala Ser Arg Ile  
 35 40 45

Cys Trp Arg Ser Phe Leu Arg Phe Phe Pro Asp Ser Val Met Leu Ala  
           50                          55                          60  
 Arg Ala Leu Asp Ala Arg Phe Leu Arg Trp Cys Arg Val Ile Ser Pro  
       65                          70                          75                          80  
 Trp Ser Ile Thr Ala Pro Thr Thr Arg Cys Leu Arg Arg Arg Ser Arg  
                           85                          90                          95  
 Phe Asn Thr Arg Arg Arg Leu Asn Ser Phe Phe Phe Ser Ser Val Arg  
                           100                          105                          110  
 Gly Arg Leu Ile Phe Pro Pro Gly Ala Pro Ile Val Ala Ile Pro Leu  
           115                          120                          125  
 Gln Phe Thr Val Arg Thr Ser Ala Gln Arg Arg Ile Arg Gly Leu Arg  
       130                          135                          140  
 Pro Gly Leu Pro Arg Ala Asn Arg Asn Ser Gly Ala Gly Pro Arg Ala  
       145                          150                          155                          160  
 Ile

<210> 121  
 <211> 49  
 <212> PRT  
 <213> Homo sapiens

<400> 121  
 Phe Phe Gln Ser Ala Arg Ala Leu Leu Gln Met Glu Leu Thr Ala Arg  
       1                          5                          10                          15  
 Glu Ala Leu Leu Gln Ser Phe Phe Cys Thr Phe Phe Pro Pro Lys Asp  
                           20                          25                          30  
 Ile Pro Leu Gly Glu Val Ser Arg Pro Leu Gly Arg Arg Lys Ser Gly  
           35                          40                          45  
 Glu

<210> 122  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 122  
 Lys Gly Ala Leu Leu Leu Ser Lys Ser Ser Glu Thr Thr Thr Glu Ser  
       1                          5                          10                          15  
 Glu Gly Trp Leu Gln Leu Arg Ile Phe  
           20                          25

<210> 123

<211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 123  
 Trp Lys Arg Phe Ser Ser His Leu Gln Gly Pro Ser Phe Leu His Pro  
   1                  5                  10                  15  
 Gly Gly Leu Leu Ser Ser Phe Ala Phe  
                   20                  25

<210> 124  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 124  
 Trp Leu Leu Gln Leu Lys Pro His Leu Leu Ala His His Pro Pro Lys  
   1                  5                  10                  15  
 Gly Leu Pro His Arg Gly Ala Pro Leu Tyr Ser Pro Arg Thr Arg Pro  
                   20                  25                  30  
 Arg Val Ala Ile Gly Pro Arg Lys Ala Gly Ala Glu Pro Ala Asp Pro  
                   35                  40                  45  
 Ala Leu Ser Gly Ser Thr Asp Arg Glu Leu Glu Trp Asn Arg Asp Tyr  
   50                  55                  60  
 Gly Ser Ser Gly Gly Lys Asp Gln Pro Ala Pro Asn Gly Ala Glu Glu  
   65                  70                  75                  80  
 Glu Ala Val Gln Thr Pro Ala Gly Val Glu Ser Gly Ala Ala Ser Glu  
                   85                  90                  95  
 Ala Pro Gly Gly Arg Gly Cys Asp Arg Pro Arg Ala Asp His Ala Ala  
                   100                  105                  110  
 Pro Pro Gln Glu Ala Gly Val Gln Cys Thr Cys Gln His Tyr Thr Val  
                   115                  120                  125  
 Arg Glu Glu Ala Gln Lys Thr Pro Pro Ala Asp Pro Ala Cys Pro Glu  
                   130                  135                  140  
 Arg Glu Asp Ser His Gly Ser Gly Ser Pro Phe Lys Ala Ser Gln Asp  
   145                  150                  155                  160

<210> 125

<400> 125  
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<210> 126

<400> 126  
000

<210> 127

<400> 127  
000

<210> 128  
<211> 78  
<212> PRT  
<213> Homo sapiens

<400> 128  
Phe Phe Phe Pro Cys Gln Pro Phe Ile Gly Ser Gly Thr His Glu Val  
1 5 10 15  
Gln Leu Val Pro Gly Thr Val His Ser Leu Lys Gln Leu Lys Gly Leu  
20 25 30  
Ser Pro Asp Thr Asp Ala Thr Leu Ser Arg Met His Gly Pro Gly Leu  
35 40 45  
Thr Leu Ser Met Glu Glu Val Gly Ser Ala Arg Gly Gly Arg Met Val  
50 55 60  
Ala Arg Asp Thr Glu Ser Leu Val Leu Gly Leu Trp Leu Ser  
65 70 75

<210> 129  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 129  
Cys Ala Leu Leu Pro Pro Thr Pro Ser Arg Thr Glu Pro Ser Leu His  
1 5 10 15  
Ser Thr Gly Asp Ser Gly Lys Gly Ala Glu Asp Arg Gln Glu Ala His  
20 25 30  
Arg Asp Arg Pro Thr Gly Ser Gln Ala Ala Pro Glu Glu Arg Asp Ile  
35 40 45  
Gln Thr Glu Glu Ser Leu Pro Ala Pro His Ser Phe Gln Asp Glu Lys  
50 55 60  
Asn Leu Pro Pro Pro Pro Asp Thr Asp Ala Arg Glu Val Gly Gly Arg  
65 70 75 80  
Ser Gly Lys Phe Pro Phe Pro Val Pro Pro Arg Thr Ser Glu Pro Ser  
85 90 95  
Met Leu Asn Phe Phe Phe Ile Lys Ile Thr Phe Ile Leu  
100 105

<210> 130  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 130  
 Ser Leu Pro Ala Asp Val Pro Cys Cys Pro Pro Pro His Pro Ala Gln  
           1                  5                  10                  15  
 Asn His Pro Cys Ile Pro Gln Gly Thr Arg Ala Arg Val Pro Lys Ile  
                   20                  25                  30  
 Asp Lys Arg His Thr Glu Thr Asp Gln Leu Ala Ala Arg Gln Pro Gln  
                   35                  40                  45  
 Arg Arg Glu Thr Phe Arg Gln Arg Lys Val Ser Leu Pro Leu Ile Pro  
           50                  55                  60  
 Ser Lys Met Arg Lys Thr Cys Arg His Pro Pro Thr Leu Met Pro Gly  
           65                  70                  75                  80  
 Arg Trp Glu Glu Glu Val Gly Asn Phe Pro Ser Gln Tyr Pro Gln Glu  
                   85                  90                  95  
 Arg Leu Ser Leu Gln Cys  
                   100

<210> 131  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 131  
 Leu Cys Gln Leu Met Cys Pro Val Ala Pro His Pro Ile Pro His Arg  
           1                  5                  10                  15  
 Thr Ile Pro Ala Phe His Arg Gly Leu Gly Gln Gly Cys Arg Arg  
                   20                  25                  30

<210> 132  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 132  
 Gly Phe Arg Pro Ala Arg Cys Asp Pro Val Pro Leu Pro Thr Thr Arg  
           1                  5                  10                  15  
 Ser Val Ala Gly Leu Pro Val Gly Arg Val Arg Gln Leu Ser Arg Pro  
                   20                  25                  30  
 Leu Leu Gly Pro Asp Thr Gly Ser Val Ala Asn Ile Phe Lys Gly Leu  
           35                  40                  45

Val Ile Leu Pro Glu Met Ser Leu Val Ile Arg Asn Leu Gln Arg Val  
 50 55 60

Ile Pro Ile Arg Arg Ala Pro Leu Arg Ser Lys Ile Glu Ile Val Arg  
 65 70 75 80

Arg Ile Leu Gly Val Gln Lys Phe Asp Leu Gly Ile Ile Cys Val Asp  
 85 90 95

Asn Lys Asn Ile Gln His Ile Asn Arg Ile Tyr Arg Asp Arg Asn Val  
 100 105 110

Pro Thr Asp Val Leu Ser Phe Pro Phe His Glu His Leu Lys Ala Gly  
 115 120 125

Glu Phe Pro Gln Pro Asp Phe Pro Asp Asp Tyr Asn Leu Gly Asp Ile  
 130 135 140

Phe Leu Gly Val Glu Tyr Ile Phe His Gln Cys Arg Glu Asp Glu Asp  
 145 150 155 160

Tyr Asn Asp Val Leu Thr  
 165

<210> 133

<211> 244

<212> PRT

<213> Homo sapiens

<400> 133

Phe Asp Pro Lys Leu Leu Glu Gly Lys Val Lys Glu Asp Pro Asp Gln  
 1 5 10 15

Gly Glu Ser Met Lys Pro Leu Thr Phe Ala Arg Phe Tyr Leu Pro Ile  
 20 25 30

Leu Val Pro Ser Ala Lys Lys Ala Ile Tyr Met Asp Asp Asp Val Ile  
 35 40 45

Val Gln Gly Asp Ile Leu Ala Leu Tyr Asn Thr Ala Leu Lys Pro Gly  
 50 55 60

His Ala Ala Ala Phe Ser Glu Asp Cys Asp Ser Ala Ser Thr Lys Val  
 65 70 75 80

Val Ile Arg Gly Ala Gly Asn Gln Tyr Asn Tyr Ile Gly Tyr Leu Asp  
 85 90 95

Tyr Lys Lys Glu Arg Ile Arg Lys Leu Ser Met Lys Ala Ser Thr Cys  
 100 105 110

Ser Phe Asn Pro Gly Val Phe Val Ala Asn Leu Thr Glu Trp Lys Arg  
 115 120 125

Gln Asn Ile Thr Asn Gln Leu Glu Lys Trp Met Lys Leu Asn Val Glu  
 130 135 140

Glu Gly Leu Tyr Ser Arg Thr Leu Ala Gly Ser Ile Thr Thr Pro Pro  
 145 150 155 160  
 Leu Leu Ile Val Phe Tyr Gln Gln His Ser Thr Ile Asp Pro Met Trp  
 165 170 175  
 Asn Val Arg His Leu Gly Ser Ser Ala Gly Lys Arg Tyr Ser Pro Gln  
 180 185 190  
 Phe Val Lys Ala Ala Lys Leu Leu His Trp Asn Gly His Leu Lys Pro  
 195 200 205  
 Trp Gly Arg Thr Ala Ser Tyr Thr Asp Val Trp Glu Lys Trp Tyr Ile  
 210 215 220  
 Pro Asp Pro Thr Gly Lys Phe Asn Leu Ile Arg Arg Tyr Thr Glu Ile  
 225 230 235 240  
 Ser Asn Ile Lys

<210> 134  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens

<400> 134  
 Pro Ser Phe Ile Ile His Ser Asn Pro Ile Trp Leu Gly Ala Leu Leu  
 1 5 10 15  
 Trp Val Ser His Cys Pro Ser Ser Ile Leu Gly Ser Leu Arg Pro Arg  
 20 25 30  
 Gly Gly Lys Ile Gln Leu Arg Val Gly Gly Ser Glu Pro Cys Arg Ile  
 35 40 45  
 Met Lys Ala Thr Cys Phe Gly Asn Asp Leu Pro Leu Pro Val Val  
 50 55 60

<210> 135  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<400> 135  
 Asp Tyr Leu Arg Leu Ser Ser Gly Phe Cys Gln Asn Thr Pro Leu Thr  
 1 5 10 15  
 Glu Ser Thr Glu Gly Met Gly Val Gly Gly Leu Gly Arg Val Arg Leu  
 20 25 30  
 Glu Cys Glu Gly Ser Leu Ile Tyr Ala Glu Leu Lys Ser Pro Ser Leu  
 35 40 45  
 Tyr Val His Thr Phe Val Leu Phe Ser Arg Leu Ile Leu Ala Ile Pro  
 50 55 60



Asn Pro Leu Pro Arg  
65

<210> 136  
<211> 47  
<212> PRT  
<213> Homo sapiens

<400> 136  
Gln Pro Phe Arg Tyr Phe Asn Thr Pro Leu Ser Ile Leu His Phe Pro  
1 5 10 15  
His Leu Ser Lys Leu Asn Leu Val His Arg Val Gly Leu Cys Met Cys  
20 25 30  
Met Gln Glu Val Gly Val Asp Ser Ala Leu Gly Trp Asn Pro Pro  
35 40 45

<210> 137  
<211> 83  
<212> PRT  
<213> Homo sapiens

<400> 137  
Val Pro Pro Cys Pro Gln Leu Arg Glu Leu Cys Pro Gly Val Asn Asn  
1 5 10 15  
Gln Pro Tyr Leu Cys Glu Ser Gly His Cys Cys Gly Glu Thr Gly Cys  
20 25 30  
Cys Thr Tyr Tyr Tyr Glu Leu Trp Trp Phe Trp Leu Leu Trp Thr Val  
35 40 45  
Leu Ile Leu Phe Ser Cys Cys Cys Ala Phe Arg His Arg Arg Ala Lys  
50 55 60  
Leu Arg Leu Gln Gln Gln Gln Arg His Val Glu Ile Asn Leu Leu Ala  
65 70 75 80  
Tyr His Gly

<210> 138

<400> 138  
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<210> 139  
<211> 88  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 139

Trp Lys Ser Trp Gln Leu His Arg Met Leu Leu Thr Arg Thr Glu Phe  
 1 5 10 15

Trp Tyr Leu Ser Thr Glu Val Ser Thr Met Phe Thr Cys Lys Arg Leu  
 20 25 30

Arg Lys Lys Pro Leu Lys Trp Thr Gly Ile Gln Ser Ser Phe Ser Val  
 35 40 45

Thr His Gln Ser Asp Lys Arg Leu Val Thr Thr Leu Pro Gly Leu Phe  
 50 55 60

Ser Phe Tyr Asn Ser Ser Ser Ile His Asn Asp Phe Val Leu Cys Ser  
 65 70 75 80

Ile Phe Phe Asn Pro Leu Ser Ile  
 85

&lt;210&gt; 140

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 140

Cys Tyr Met His Phe Leu Thr Phe Val Lys Asn Val Thr Ile Val Lys  
 1 5 10 15

Lys Cys Thr Lys Met  
 20

&lt;210&gt; 141

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 141

Met Glu Ile Glu Gln Val His Phe Pro Ala Tyr Arg Gln Leu Tyr Thr  
 1 5 10 15

Asp Leu Asn Ile Phe Ser Ser Cys Leu Val Lys Val Lys Glu Lys Gly  
 20 25 30

Phe Phe Leu Pro Gln Asp Ile Thr Phe Phe Tyr Ile Thr Ser Ile Thr  
 35 40 45

His His Cys Phe Trp Trp Lys Ser Ala Glu  
 50 55

&lt;210&gt; 142

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 142

Asn Ser Phe Leu Thr Gln Met Met Val Leu Gln Asn Asn Lys Met Ala  
 1 5 10 15

Glu His Phe His Lys  
 20

&lt;210&gt; 143

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 143

Ser Val Thr Lys Ser Gly Phe Leu Ile Pro Cys His Leu Gly Asp Phe  
 1 5 10 15

Ile Leu Leu Cys Cys Phe Lys Ile Gln Cys Arg Glu Val Val Asp Cys  
 20 25 30

Arg Gly Asn Lys Val Asn Ser Asn Phe Glu Lys Lys  
 35 40

&lt;210&gt; 144

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 144

Asn Pro Pro Asn Asp Lys Val Ser Glu Ile Gln Thr Ser Leu His Ser  
 1 5 10 15

Ile Cys Glu Asn Val Gln Pro Phe Tyr Cys Ser Val Lys Glu Pro Ser  
 20 25 30

Ser Gly Ser Lys Met Asn Ser Ile Asn Gln Arg Ile Phe Tyr Thr Leu  
 35 40 45

Glu Lys Lys Ile Ser Ser Asn Ile Leu Thr Glu Tyr Cys Lys Leu His  
 50 55 60

Phe Ser Ser  
 65

&lt;210&gt; 145

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 145

Lys Val His Thr Ile Leu His Phe Ser Thr Lys Ser Ser Gly Val Leu  
 1 5 10 15

Cys Leu Leu Tyr Lys Lys Lys Leu Tyr Pro Val Ala Gly Lys Thr Leu  
 20 25 30

Ser Leu Ser Leu Leu Leu Asn Asn Trp Arg Lys Cys Ser Ser Leu Tyr  
                   35                                  40                                  45

Lys Val Ala Tyr Lys Leu Glu Ser Glu Leu Val Gln Ser Pro Phe Thr  
           50                                  55                                  60

Phe  
   65

<210> 146

<211> 55

<212> PRT

<213> Homo sapiens

<400> 146

Lys Ile Trp Ser Arg Glu Gln Asn His Cys Glu Trp Met Asn Cys Cys  
   1                                  5                                  10                                  15

Lys Met Lys Lys Val Gln Ala Lys Leu Leu Gln Val Phe Cys His Phe  
                   20                                  25                                  30

Asp Glu Ser Gln Lys Met Asn Phe Gly Tyr Leu Ser Thr Leu Arg Val  
                   35                                  40                                  45

Phe Ser Leu Ile Phe Cys Met  
           50                                  55

<210> 147

<211> 113

<212> PRT

<213> Homo sapiens

<400> 147

Ile Pro Glu Asp Pro His Ile Asp Glu Ser Lys Ala Lys His Gln Ala  
   1                                  5                                  10                                  15

Ile Ile Met Ser Thr Ser Leu Arg Val Ser Pro Ser Ile His Gly Tyr  
                   20                                  25                                  30

His Phe Asp Thr Ala Ser Arg Lys Lys Ala Val Gly Asn Ile Phe Glu  
                   35                                  40                                  45

Asn Thr Asp Gln Glu Ser Leu Glu Arg Leu Phe Arg Asn Ser Gly Asp  
           50                                  55                                  60

Lys Lys Ala Glu Glu Arg Ala Lys Ile Ile Phe Ala Ile Asp Gln Asp  
   65                                  70                                  75                                  80

Val Glu Glu Lys Thr Arg Ala Leu Met Ala Leu Lys Lys Arg Thr Lys  
                   85                                  90                                  95

Asp Lys Leu Phe Gln Phe Leu Lys Leu Arg Lys Tyr Ser Ile Lys Val  
                   100                                  105                                  110

His

<210> 148  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

<400> 148  
 Met Gln His Phe Ala Ala Thr Leu Gln Ala Ser Leu Leu Ser Gly Leu  
   1                  5                  10                  15  
 Gln Arg Leu Glu Arg Asp Arg Asp Trp Lys Gly Thr Arg Thr Glu Gln  
           20                  25                  30  
 Thr Gly Tyr Lys Asp Ser Lys Gln Phe His Ala Leu Cys Cys Tyr Arg  
           35                  40                  45  
 Gly Glu Gln Asn Ala Phe Ser Lys Asp Leu Lys Thr Leu Pro Ser Leu  
           50                  55                  60  
 Gln Glu Arg Ile Asp Ala Asp Arg Arg Ala Trp Thr Asp Val Met Arg  
           65                  70                  75                  80  
 Thr Lys Glu Asn Asp Gly Trp Arg  
                   85

<210> 149  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 149  
 Val Val Glu Gly Pro Asp Cys Gly His His Gly Asp Ala Gly Ala Glu  
   1                  5                  10                  15  
 Val Pro Arg Cys Leu Trp Pro Arg Ser Gly Ile Cys Gly Arg Glu Cys  
           20                  25                  30  
 Gly Leu Gly Asp Arg Trp Phe Leu Arg Val Glu Asp Arg Gln Asp Leu  
           35                  40                  45  
 Asn Arg Gln Arg Ile Gln Arg Tyr Ala Gln Ala Phe His Thr Arg Gly  
           50                  55                  60  
 Ser Glu Asp Leu Asp Lys Asp Ser Val Glu Lys Leu Glu Leu Gly Cys  
           65                  70                  75                  80  
 Pro Phe Ser Pro His Leu Ser Leu Pro Met Pro Ser Val Ser Arg Ser  
                   85                  90                  95  
 Thr Ser Arg Ser Ser Ala Asn Trp Glu Arg Leu Arg Gln Gly Thr Leu  
           100                  105                  110  
 Arg Arg Asp Leu Arg Gly Ile Ile Asn Arg Gly Leu Glu Asp Gly Glu  
           115                  120                  125  
 Ser Trp Glu Tyr Gln Ile  
           130

<210> 150

<400> 150  
000

<210> 151

<400> 151  
000

<210> 152  
<211> 99  
<212> PRT  
<213> Homo sapiens

<400> 152  
Met Lys Val Ser Ala Ala Leu Leu Cys Leu Leu Leu Ile Ala Ala Thr  
1 5 10 15  
Phe Ile Pro Gln Gly Leu Ala Gln Pro Asp Ala Ile Asn Ala Pro Val  
20 25 30  
Thr Cys Cys Tyr Asn Phe Thr Asn Arg Lys Ile Ser Val Gln Arg Leu  
35 40 45  
Ala Ser Tyr Arg Arg Ile Thr Ser Ser Lys Cys Pro Lys Glu Ala Val  
50 55 60  
Ile Phe Lys Thr Ile Val Ala Lys Glu Ile Cys Ala Asp Pro Lys Gln  
65 70 75 80  
Lys Trp Val Gln Asp Ser Met Asp His Leu Asp Lys Gln Thr Gln Thr  
85 90 95  
Pro Lys Thr

<210> 153

<400> 153  
000

<210> 154  
<211> 52  
<212> PRT  
<213> Homo sapiens

<400> 154  
Val Phe Phe Phe Thr Ala Glu Asn Trp Trp Tyr Phe His Ile His Ser  
1 5 10 15  
Val Ser Ile Gln Phe Gln Tyr Pro His Leu Met Arg Lys Lys Cys Phe  
20 25 30

Thr Asn Glu Gly Gly Ile Leu Lys Leu Ala Val Met Leu Gly Trp Arg  
                   35                  40                  45

Lys Phe Gly Ile  
           50

<210> 155  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 155  
 Phe Phe Phe Leu Leu Gln Lys Ile Gly Gly Ile Phe Thr Phe Ile Val  
   1                  5                  10                  15

Phe Leu Ser Asn Phe Ser Thr His Ile  
                   20                  25

<210> 156  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 156  
 Ile Ser Cys Asn Val Arg Leu Glu Lys Ile Trp Tyr Leu Gly Tyr Phe  
   1                  5                  10                  15

Gln Gly Thr Ile Lys Ser Asp Phe Cys Phe Phe Val Lys Lys Asn Phe  
                   20                  25                  30

Phe Asn Gln Tyr Cys Phe Tyr Lys  
                   35                  40

<210> 157  
 <211> 66  
 <212> PRT  
 <213> Homo sapiens

<400> 157  
 Asn Ala Asn Tyr Cys Ile His His Lys Leu Lys Lys Arg Thr Cys Ile  
   1                  5                  10                  15

Arg Arg Leu Lys Thr Arg Lys Lys Ile Gln His Pro Asn Met Tyr Ser  
                   20                  25                  30

Gln Glu Gly Asn Gln Phe Cys Asn Arg Thr Gly Ile Met Asn Tyr Lys  
                   35                  40                  45

Gln Glu Gly Val Glu Lys Glu Glu Lys Lys Met Cys Ile Glu Phe Lys  
                   50                  55                  60

Thr Leu  
       65

<210> 158  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 158  
 Pro Cys Cys Glu Val Leu Ala Gly Val Gly Asn Val Trp Lys Cys Ser  
           1                  5                  10                  15  
 Gln Gln Val Cys Trp Gly Val  
                   20

<210> 159  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 159  
 Pro Ala Val Lys Ser Trp Gln Val Leu Val Met Cys Gly Asn Ala Val  
           1                  5                  10                  15  
 Ser Lys Phe Ala Gly Glu Phe Asp Lys Ser Ile Lys Gln Asn Lys Lys  
                   20                  25                  30  
 Ser Leu Gly Ile Ile Leu Phe His Asp Phe Phe Cys Ser Phe Thr Pro  
                   35                  40                  45  
 Glu Gly Arg Asn Gly Leu Gln Gln Val Val Glu Glu Glu Gly Gly Glu  
           50                  55                  60  
 Gln Val Tyr  
           65

<210> 160  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 160  
 Glu Gly Glu Pro Ala Cys Ser Gly Ile Gln Ala Arg Arg Val Thr Pro  
           1                  5                  10                  15  
 Cys Pro Ser Pro Arg Asp Ala Ser Pro Ala Pro Ala Ser Glu Thr Ser  
                   20                  25                  30  
 Leu Ser Val Pro Ala Thr Leu Val Gly Gly Ser Asp Leu Ile His Phe  
                   35                  40                  45  
 Gln Val Gly Ser Gly Pro Thr Pro Gly Pro Ala Glu Asp Arg Ala Ala  
           50                  55                  60  
 Arg Pro Ser Trp Leu Thr Leu Gln Leu Ala Leu Gly Trp Gly Gly Arg  
           65                  70                  75                  80



Glu Leu Met Ser Val Ala Ser Leu Ser Trp Gly Phe Pro Ala Cys Pro  
                                   85                                  90                                  95

Val Val Ser Cys Pro Arg Cys Tyr Arg Gly Cys Ala  
                                   100                                  105

<210> 161

<211> 20

<212> PRT

<213> Homo sapiens

<400> 161

Phe Cys Ser Thr Thr Ser Ser Val Ala Leu His Gln Lys Glu Gly Met  
       1                                  5                                  10                                  15

Gly Tyr Ser Arg  
                   20

<210> 162

<211> 61

<212> PRT

<213> Homo sapiens

<400> 162

Ile Pro Gly Leu Lys Tyr Phe Val Gly Ile Ala Tyr Tyr Ile Ile Leu  
       1                                  5                                  10                                  15

Ala Asp Glu Pro Gln Asp Asn Gly Tyr Arg His Thr His Thr Tyr Thr  
                                   20                                  25                                  30

His Thr Lys Ser Gln Leu Leu Lys Ser Gly Leu Gly Ile Arg Leu Leu  
                                   35                                  40                                  45

Cys Pro Val Lys Asn Ser Cys Thr Glu Val Ile Val Thr  
                                   50                                  55                                  60

<210> 163

<211> 22

<212> PRT

<213> Homo sapiens

<400> 163

Leu Met Asn Leu Arg Thr Thr Ala Thr Asp Thr His Ile His Thr Arg  
       1                                  5                                  10                                  15

Thr Gln Asn Leu Ser Cys  
                   20

<210> 164

<211> 37

<212> PRT

<213> Homo sapiens

&lt;400&gt; 164

Thr Ser Gly Gln Arg Leu Gln Thr His Thr Tyr Ile His Ala His Lys  
 1 5 10 15

Ile Ser Ala Val Glu Glu Trp Ala Trp Asn Gln Thr Ser Val Ser Ser  
 20 25 30

Lys Lys Leu Leu His  
 35

&lt;210&gt; 165

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 165

Thr Val Pro Phe Ser Val Ser Ala Ser Gly Phe His Leu Ile Phe Phe  
 1 5 10 15

Ala Leu Pro Ile Leu Phe Gln Pro Val Ala Lys Asn His Glu Thr Arg  
 20 25 30

Gln Trp Lys His Arg His Arg Arg Arg Gly Pro Ser Cys Ala Leu Lys  
 35 40 45

Ala Gly Lys Thr Ala Ser Gly Ala Gly Glu Val Val Arg Cys Leu Ser  
 50 55 60

Glu Gln Ser Val Ala Ile Ser Arg  
 65 70

&lt;210&gt; 166

&lt;400&gt; 166

000

&lt;210&gt; 167

&lt;400&gt; 167

000

&lt;210&gt; 168

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 168

Leu Ile Ser Thr Ser Glu Glu Val Leu Thr Phe Ser Met Leu His Arg  
 1 5 10 15

Asn Trp Tyr Asn Met Pro Ser Val Tyr  
 20 25

&lt;210&gt; 169

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 169

Leu Lys Leu Leu Ala Trp Ser Tyr Leu His Ser Phe Cys Val Leu Phe  
 1 5 10 15

Ala Ser Cys Ile  
 20

&lt;210&gt; 170

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 170

Leu Leu Ala Cys Cys Thr Glu Thr Gly Ile Thr Cys Leu Gln Tyr Thr  
 1 5 10 15

Asn Thr His Met Leu Ser Phe Val Leu Phe Trp Gln Leu Thr Arg Ser  
 20 25 30

&lt;210&gt; 171

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 171

Ile Ala Leu Ser Cys Cys Phe Asn Val Val His Thr Ile Ala Ser Gln  
 1 5 10 15

Thr Cys Tyr Ser Ser Val Ile Cys Ser Val Val Thr Lys Val Thr Gly  
 20 25 30

Leu Val Leu Phe Ala Gln Phe Leu Arg Leu Val Cys Phe Leu His Leu  
 35 40 45

Ile Asn  
 50

&lt;210&gt; 172

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 172

Glu His Tyr Thr Ile Gly Phe Gln Tyr Cys Thr His Lys Ile His Thr  
 1 5 10 15

Cys Val Gln Lys Val Ser Ser Ser Arg Leu Val Ile Pro Phe Thr Trp  
 20 25 30

Lys Ile Asn Glu Gly Asn Leu Tyr Ile Leu Tyr Lys Asn Lys Ser Lys  
                   35                                  40                                  45

Phe Ile Tyr  
           50

<210> 173

<211> 239

<212> PRT

<213> Homo sapiens

<400> 173

Leu Phe Ile His Phe Arg Asn Asn Thr Asn Asn Trp Arg Glu Ile Pro  
   1                                  5                                  10                                  15

Glu Asn Leu Met Asp Gln Tyr Ser Glu Val Asn Ala Ile Ser Thr Ala  
                   20                                  25                                  30

Cys Ser Asn Gly Val Pro Glu Cys Glu Glu Met Val Ser Gly Leu Phe  
                   35                                  40                                  45

Lys Gln Trp Met Glu Asn Pro Asn Asn Asn Pro Ile His Pro Asn Leu  
                   50                                  55                                  60

Arg Ser Thr Val Tyr Cys Asn Ala Ile Ala Gln Gly Gly Glu Glu Glu  
   65                                  70                                  75                                  80

Trp Asp Phe Ala Trp Glu Gln Phe Arg Asn Ala Thr Leu Val Asn Glu  
                                   85                                  90                                  95

Ala Asp Lys Leu Arg Ala Ala Leu Ala Cys Ser Lys Glu Leu Trp Ile  
                   100                                  105                                  110

Leu Asn Arg Tyr Leu Ser Tyr Thr Leu Asn Pro Asp Leu Ile Arg Lys  
                   115                                  120                                  125

Gln Asp Ala Thr Ser Thr Ile Ile Ser Ile Thr Asn Asn Val Ile Gly  
   130                                  135                                  140

Gln Gly Leu Val Trp Asp Phe Val Gln Ser Asn Trp Lys Lys Leu Phe  
   145                                  150                                  155                                  160

Asn Asp Tyr Gly Gly Gly Ser Phe Ser Phe Ser Asn Leu Ile Gln Ala  
                                   165                                  170                                  175

Val Thr Arg Arg Phe Ser Thr Glu Tyr Glu Leu Gln Gln Leu Glu Gln  
                   180                                  185                                  190

Phe Lys Lys Asp Asn Glu Glu Thr Gly Phe Gly Ser Gly Thr Arg Ala  
                   195                                  200                                  205

Leu Glu Gln Ala Leu Glu Lys Thr Lys Ala Asn Ile Lys Trp Val Lys  
                   210                                  215                                  220

Glu Asn Lys Glu Val Val Leu Gln Trp Phe Thr Glu Asn Ser Lys  
   225                                  230                                  235

<210> 174

<400> 174  
000

<210> 175

<400> 175  
000

<210> 176

<400> 176  
000

<210> 177

<400> 177  
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<210> 178

<400> 178  
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<210> 179

<400> 179  
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<210> 180

<400> 180  
000

<210> 181

<400> 181  
000

<210> 182

<400> 182  
000

<210> 183

<211> 109

<212> PRT

<213> Homo sapiens

<400> 183

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Tyr Ala Asn Gln Ser Ser Ser Leu Arg Phe Lys Ile Lys Tyr Lys Leu
 1              5              10              15

Leu Cys Phe Ser Thr His Ser Gly Ser Ile Val Pro Glu Pro Asp Cys
          20              25              30

Tyr Phe Phe Ile Leu Asn Ile Ile Phe Pro His Leu Ile Cys Leu Pro
          35              40              45

Leu Ile His Arg His Leu Glu Lys Glu Met Gly Gly Cys Leu Leu Ser
          50              55              60

Leu Ser Leu Cys Phe Val Pro Val Val Arg Leu Ala Ala Ser Val Ala
          65              70              75              80

Arg Trp Ala Trp Leu Glu Pro Trp Val Arg Gln Val Ala Gly Gly Asp
          85              90              95

Arg Glu Arg Leu Arg Gly Lys Trp Trp His Leu Leu Leu
          100              105

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<210> 184

<211> 33

<212> PRT

<213> Homo sapiens

<400> 184

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Ser Leu Phe Leu Ser Ser Thr Gly Val Ser Ala Pro Leu Gln Gly Gln
 1              5              10              15

Ser Lys Ser Leu His Pro Glu Pro Pro Pro Ile Pro Val His Phe Ser
          20              25              30

Arg

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<210> 185

<211> 46

<212> PRT

<213> Homo sapiens

<400> 185

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His Ser Phe Ser Ala Arg Leu Glu Phe Leu His Leu Cys Arg Gly Lys
 1              5              10              15

Val Ser Pro Cys Thr Leu Asn His Pro Pro Phe Leu Phe Ile Ser Ala
          20              25              30

Asp Asn Asp Gly Gly Gly Gly Val Ser Ile Val Leu Arg Val
          35              40              45

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<210> 186

<211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 186  
 Val Glu Gly Thr Cys Ser Asp Gly Val Phe Ser Gly Phe Leu Ala Pro  
           1                  5                  10                  15  
 Gly Cys Ala Val His Arg Pro His Arg Pro Trp Pro Gln His Pro Gln  
                   20                  25                  30  
 Gln Gly Gln Trp Lys Cys Gln Ser Ser Lys Cys His His Phe Pro Leu  
                   35                  40                  45  
 Ser Leu Ser Leu Ser Pro Pro Ala Thr Cys Leu Thr His Gly Ser Asn  
           50                  55                  60  
 Gln Ala His Arg Ala Thr Asp Ala Ala Ser Leu Thr Thr Gly Thr Lys  
           65                  70                  75                  80  
 Gln Arg Glu Arg Asp Asn Arg His Pro Pro Ile Ser Phe Ser Lys Cys  
                   85                  90                  95  
 Leu Trp Met Arg Gly Arg Gln Ile Arg  
           100                  105

<210> 187  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<400> 187  
 Arg Gly His Ala Val Thr Glu Tyr Leu Val Gly Ser Leu Leu Ala  
           1                  5                  10                  15  
 Val Gln Phe Thr Gly Pro Thr Gly Leu Gly Pro Ser Ile Pro Ser Arg  
                   20                  25                  30  
 Asp Ser Gly Ser Val Arg Ala Val Asn Ala Thr Thr Ser Leu Ser Ala  
           35                  40                  45  
 Ser Pro Cys Pro Arg Gln Pro Pro Ala Ser Pro Thr Ala Leu Thr Lys  
           50                  55                  60  
 Pro Thr Glu Gln Leu Thr Leu Pro Val  
           65                  70

<210> 188  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 188  
 Met Phe Phe Ile Phe Phe Met Leu Ser Ile Gln Ala Leu Phe His Gly  
           1                  5                  10                  15

Gln Gln Val Ile Phe His Asn Val Asp Phe Pro Lys  
                   20                                  25

<210> 189  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<400> 189  
 Leu Leu Asn Thr Ala Ile Leu Trp Leu Leu Leu Val Phe Leu Trp Tyr  
       1                                  5                                  10                                  15

Val Val Trp Glu Cys Leu Trp Asn Tyr Gln Tyr Leu Lys Phe Ser Lys  
                                   20                                  25                                  30

Glu Pro Trp Lys Ser Ile Thr Leu Asn Glu Ser Leu Ser Leu Tyr Met  
                                   35                                  40                                  45

Asn Tyr Val Leu Lys Phe Asp Gln Leu Ser Leu Arg His Lys Thr Val  
                   50                                  55                                  60

Ile  
 65

<210> 190  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 190  
 Cys Phe Ser Phe Phe Ser Cys Tyr Leu Ser Lys His Cys Ser Met Val  
       1                                  5                                  10                                  15

Ser Lys Ser Tyr Phe Ile Met Trp Ile Phe Gln Asn Asn Tyr  
                                   20                                  25                                  30

<210> 191  
 <211> 41  
 <212> PRT  
 <213> Homo sapiens

<400> 191  
 Phe Phe Phe Phe Val Thr Asn Val Phe Tyr Leu Phe Ile Asn Lys Lys  
       1                                  5                                  10                                  15

Cys Ile Val Gln Ala Leu Tyr Pro Asn Pro Ser Thr Gln Lys Lys Ile  
                                   20                                  25                                  30

Asn Asn Arg Pro Trp Met Ala Gln Thr  
                   35                                  40

<210> 192  
 <211> 29  
 <212> PRT



<213> Homo sapiens

<400> 192

Tyr Lys Pro Phe Ile Pro Ile Gln Val Leu Arg Lys Arg Leu Thr Thr  
1 5 10 15

Asp Pro Gly Trp His Arg His Asn Leu Phe Gly Val Ile  
20 25

<210> 193

<211> 33

<212> PRT

<213> Homo sapiens

<400> 193

Ser Ser His Met Val Thr Asn Thr Tyr Asp Phe Ser Phe Arg Asn Ile  
1 5 10 15

Ile Arg Arg Leu Asn Leu Leu Leu Gln Gln Gln Lys Phe Asn Pro Leu  
20 25 30

Asn

<210> 194

<211> 153

<212> PRT

<213> Homo sapiens

<400> 194

Thr Pro Leu Arg Lys Glu Val Leu Lys Ser Lys Met Gly Lys Ser Glu  
1 5 10 15

Lys Ile Ala Leu Pro His Gly Gln Leu Val His Gly Ile His Leu Tyr  
20 25 30

Glu Gln Pro Lys Ile Asn Arg Gln Lys Ser Lys Tyr Asn Leu Pro Leu  
35 40 45

Thr Lys Ile Thr Ser Ala Lys Arg Asn Glu Asn Asn Phe Trp Gln Asp  
50 55 60

Ser Val Ser Ser Asp Arg Ile Gln Lys Gln Glu Lys Lys Pro Phe Lys  
65 70 75 80

Asn Thr Glu Asn Ile Lys Asn Ser His Leu Lys Lys Ser Ala Phe Leu  
85 90 95

Thr Glu Val Ser Gln Lys Glu Asn Tyr Ala Gly Ala Lys Phe Ser Asp  
100 105 110

Pro Pro Ser Pro Ser Val Leu Pro Lys Pro Pro Ser His Trp Met Gly  
115 120 125

Ser Thr Val Glu Asn Ser Asn Gln Asn Arg Glu Leu Met Ala Val His  
130 135 140

Leu Lys Thr Leu Leu Lys Val Gln Thr  
 145 150

<210> 195  
 <211> 304  
 <212> PRT  
 <213> Homo sapiens

<400> 195  
 Ser Leu Tyr Tyr Tyr Gly Ile Arg Asp Leu Ala Thr Val Phe Phe Tyr  
 1 5 10 15  
 Met Leu Val Ala Ile Ile Ile His Ala Val Ile Gln Glu Tyr Met Leu  
 20 25 30  
 Asp Lys Ile Asn Arg Arg Met His Phe Ser Lys Thr Lys His Ser Lys  
 35 40 45  
 Phe Asn Glu Ser Gly Gln Leu Ser Ala Phe Tyr Leu Phe Ala Cys Val  
 50 55 60  
 Trp Gly Thr Phe Ile Leu Ile Ser Glu Asn Tyr Ile Ser Asp Pro Thr  
 65 70 75 80  
 Ile Leu Trp Arg Ala Tyr Pro His Asn Leu Met Thr Phe Gln Met Lys  
 85 90 95  
 Phe Phe Tyr Ile Ser Gln Leu Ala Tyr Trp Leu His Ala Phe Pro Glu  
 100 105 110  
 Leu Tyr Phe Gln Lys Thr Lys Lys Glu Asp Ile Pro Arg Gln Leu Val  
 115 120 125  
 Tyr Ile Gly Leu Tyr Leu Phe His Ile Ala Gly Ala Tyr Leu Leu Asn  
 130 135 140  
 Leu Asn His Leu Gly Leu Val Leu Leu Val Leu His Tyr Phe Val Glu  
 145 150 155 160  
 Phe Leu Phe His Ile Ser Arg Leu Phe Tyr Phe Ser Asn Glu Lys Tyr  
 165 170 175  
 Gln Lys Gly Phe Ser Leu Trp Ala Val Leu Phe Val Leu Gly Arg Leu  
 180 185 190  
 Leu Thr Leu Ile Leu Ser Val Leu Thr Val Gly Phe Gly Leu Ala Arg  
 195 200 205  
 Ala Glu Asn Gln Lys Leu Asp Phe Ser Thr Gly Asn Phe Asn Val Leu  
 210 215 220  
 Ala Val Arg Ile Ala Val Leu Ala Ser Ile Cys Val Thr Gln Ala Phe  
 225 230 235 240  
 Met Met Trp Lys Phe Ile Asn Phe Gln Leu Arg Arg Trp Arg Glu His  
 245 250 255

Thr Ser Asn Val Ala Asp Ser Pro Arg Asn Lys Lys Glu Lys Ser Ser  
290 295 300

<400> 196  
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<400> 197  
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<400> 198  
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<400> 199  
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<400> 200  
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<400> 201  
Lys Met Thr Thr Ala Ala Arg Pro Thr Phe Glu Pro Ala Arg Gly Gly  
1 5 10 15

Ser Arg Asp Leu Pro Ser His Thr Lys Ile Lys Tyr Arg Gln Thr Thr  
35 40 45

Gln Asp Ala Pro Glu Glu Val Arg Asn Arg Asp Phe Arg Arg Glu Leu  
     50                    55                    60  
 Glu Glu Arg Glu Arg Ala Ala Ala Arg Glu Lys Asn Arg Asp Arg Pro  
     65                    70                    75                    80  
 Thr Arg Glu His Thr Thr Ser Ser Ser Val Ser Lys Lys Pro Arg Leu  
                     85                    90                    95  
 Asp Gln Ile Pro Ala Ala Asn Leu Asp Ala Asp Asp Pro Leu Thr Asp  
                     100                    105                    110  
 Glu Glu Asp Glu Asp Phe Glu Glu Glu Ser Asp Asp Asp Asp Thr Ala  
                     115                    120                    125  
 Ala Leu Leu Ala Glu Leu Glu Lys Ile Lys Lys Glu Arg Ala Glu Lys  
                     130                    135                    140  
 Gly Gln Gly Pro Gly Lys Gly Pro Arg Ala Lys Lys Ala Leu Arg Gly  
     145                    150                    155                    160  
 Gly Arg Val Ser Phe Trp Glu Asn Ile Gly Trp Ala Gly Asn Pro Phe  
                     165                    170                    175  
 Pro Leu Ile Leu Ser Leu Ala His Ser Lys Leu Lys Ala Asp Phe Glu  
                     180                    185                    190  
 Lys Phe Glu Arg Arg Val  
                     195

<210> 202  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 202  
 Val Leu Ile Phe Leu Val Phe Leu Leu Asp Gly Lys Ala Val Gly Ile  
     1                    5                    10                    15  
 Asn Arg Gly Gln Arg Leu Met Leu Glu Trp Pro Val Glu Val Val Glu  
                     20                    25                    30  
 Gln Ser Ser His Leu Leu Ser Gly Ala Val Ser Gly Trp Val Tyr Leu  
                     35                    40                    45  
 Lys Ala Thr Lys Cys Phe Gly  
     50                    55

<210> 203  
 <211> 66  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> MOD\_RES

&lt;222&gt; (14)

&lt;223&gt; Any naturally occurring amino acid

&lt;400&gt; 203

Ser Pro Gly Phe Phe Leu Ser Leu Pro Phe Ser Thr Gly Xaa Ala Trp  
 1 5 10 15  
 Ala Ser Ser Ser Cys His Pro Ser Arg Lys Ala Pro Ala Pro Ser Cys  
 20 25 30  
 Leu Pro Ala Ala Cys Ile Gln Gly Gln Ser Ser Gly Leu Gln Thr Gly  
 35 40 45  
 Leu Val Pro Pro Pro Leu Gln Gly Met Gly Val Gly Glu Gly Ala Phe  
 50 55 60  
 Lys Lys  
 65

&lt;210&gt; 204

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 204

His Leu Gly Tyr Gly Lys Leu Leu Trp Cys Val Val Gly Phe Leu Phe  
 1 5 10 15  
 Ser Phe Leu Ser Phe Phe Ser Pro Phe Ser Leu Leu Ala Phe Ser Phe  
 20 25 30  
 Pro Phe Pro Ser Pro Leu Ala Lys Leu Gly Pro His Pro His Val Ile  
 35 40 45  
 Leu Leu Gly Arg Arg Leu Pro His Leu Val Cys Arg Gln His Ala Ser  
 50 55 60  
 Lys Ala Arg Ala Gln Ala Cys Arg Leu Gly Trp Cys Leu Leu Arg Phe  
 65 70 75 80  
 Arg Val Trp Glu Leu Val Lys Gly Leu Ser Lys Asn Asn Lys Lys Lys  
 85 90 95  
 Lys Val Lys Ser Leu Val Ala Ser Ile His Ser Asp Pro Gly Arg Gln  
 100 105 110  
 Gln Gly Phe Val Asp Leu Asp Ser Leu Gly Met Ser Ser Cys Gln Pro  
 115 120 125  
 Gly Gln Asp Pro Gly Leu Pro Arg Ala Glu Ala Leu Pro Ala Thr Arg  
 130 135 140  
 Ile Pro Pro Leu Trp Gly Leu Cys Val Gln Arg Ser Gly Ser Glu Thr  
 145 150 155 160  
 Ser

<210> 205  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 205  
 Leu Asp Leu Val Phe Ile Val Glu His Thr Tyr Gln Gly Glu Val Leu  
   1                  5                  10                  15  
 His Thr Gln Leu Gln Ile Ile Phe Gly Lys Lys Ala Val Lys Lys Ile  
                   20                  25                  30  
 Lys Leu Gln Leu Leu  
                   35

<210> 206  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 206  
 Glu Asn Tyr Phe Ala Phe Ser Val Asn Leu Arg Ser Val Leu Asn Lys  
   1                  5                  10                  15  
 Val Gln Ser Ser Ala Arg Pro Phe Pro Ser Leu Met Ser Ala Leu Gly  
                   20                  25                  30

<210> 207  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 207  
 Cys Met Leu Gln Ile Asn Leu Tyr Phe Phe Pro Leu Gly Phe Ser Lys  
   1                  5                  10                  15  
 Asn Thr Thr Thr Ser Thr Pro Asn Glu His Gly Thr Cys Leu Phe Leu  
                   20                  25                  30  
 Pro Leu Leu Ile Tyr Ser Arg Phe Ser Ser Val Phe Phe Ser Asn Ala  
                   35                  40                  45  
 Ala Phe Ser Cys Ser Ser Gly Leu Leu Ser Gly Ser Ile Val Ala Lys  
                   50                  55                  60  
 Asp Ser Ile Arg Ser Thr Leu His Ser Asp Val Lys His Ser His Cys  
   65                  70                  75                  80  
 Leu Asp Ser Ser Ser Phe Leu Ser Ser Asn Ser Ile Thr Asp Lys Ala  
                   85                  90                  95  
 Ser Val Leu Thr Asp Glu  
                   100

<210> 208  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 208  
 Val Leu Phe Ser Lys Glu Tyr Val Ile Asp Leu Gln Val Ser Ser Arg  
           1                  5                  10                  15  
 Ile Ser Ala Lys Ala Ser Gly Ser Ala Cys Ser Ser Ser Lys Ser Ile  
                   20                  25                  30

Asn Pro

<210> 209  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 209  
 Val Ala His Trp Gln Gly Asp Gln Lys His Tyr Phe His Thr Cys Val  
           1                  5                  10                  15  
 Met Ile Leu Phe Phe Leu Arg Glu Ser His Ser Val Ala Arg Leu Gly  
                   20                  25                  30  
 Val Gln Trp His Asp Leu Gly Ser Leu Gln Pro  
           35                  40

<210> 210  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<400> 210  
 Asp Leu Thr Phe Glu Gln Ile Arg Lys Leu Asn Pro Ala Ala Asn His  
           1                  5                  10                  15  
 Arg Leu Arg Asn Asp Phe Pro Asp Glu Lys Ile Pro Thr Leu Arg Glu  
                   20                  25                  30  
 Ala Val Ala Glu Cys Leu Asn His Asn Leu Thr Ile Phe Phe Asp Val  
           35                  40                  45  
 Lys Gly His Ala His Lys Ala Thr Glu Ala Leu Lys Lys Met Tyr Met  
           50                  55                  60  
 Glu Phe Pro Gln Leu Tyr Asn Asn Ser Val Val Cys Ser Phe Leu Pro  
           65                  70                  75                  80  
 Glu Val Ile Tyr Lys Met Arg Gln Thr Asp Arg Asp Val Ile Thr Ala  
                   85                  90                  95

Leu Thr His Arg Pro Trp Ser Leu Ser His Thr Gly Asp Gly Lys Pro  
 100 105 110  
 Arg Tyr Asp Thr Phe Trp Lys His Phe Ile Phe Val Met Met Asp Ile  
 115 120 125  
 Leu Leu Asp Trp Ser Met His Asn Ile Leu Trp Tyr Leu Cys Gly Ile  
 130 135 140  
 Ser Ala Phe Leu Met Gln Lys Asp Phe Val Ser Pro Ala Tyr Leu Lys  
 145 150 155 160  
 Lys Trp Ser Ala Lys Gly Ile Gln Val Val Gly Trp Thr Val Asn Thr  
 165 170 175  
 Phe Asp Glu Lys Ser Tyr Tyr Glu Ser His Leu Gly Ser Ser Tyr Ile  
 180 185 190  
 Thr Asp Ser Met Val Glu Asp Cys Glu Pro His Phe  
 195 200

<210> 211

<400> 211  
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<210> 212

<400> 212  
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<210> 213

<400> 213  
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<210> 214

<211> 33

<212> PRT

<213> Homo sapiens

<400> 214

Ser Phe Lys Val Thr Leu Trp Lys Ser Glu Thr Arg Gly Cys His Glu  
 1 5 10 15

Gly Ser Phe Ser Phe Ser Glu Glu Lys Ile Gly Met Gly Tyr Arg Thr  
 20 25 30

Ile

<210> 215

<211> 61



&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 215

Asn Ser Lys Val Asp Val Ile Phe Thr Pro Met Ser Ile Cys Pro Ile  
 1 5 10 15

Ser Val Ser Ser Ser Pro Leu Gly Ile Tyr Ser Leu Tyr Val Asn Lys  
 20 25 30

Ile Arg Ser Ser Asp Ser Leu Ile Gln Ser Ser Ser Phe Ser Ser Leu  
 35 40 45

Phe Leu Cys Arg Leu Leu Asp Ile Tyr Cys Ser Thr Thr  
 50 55 60

&lt;210&gt; 216

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 216

Pro Met Tyr Lys Ile Ala Lys Cys Leu Leu Phe Ile Lys Arg Cys Asn  
 1 5 10 15

Gly Val Gly Gly Arg Gly Asn Phe  
 20

&lt;210&gt; 217

&lt;211&gt; 1880

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 217

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 gcctgcctgg acgagctgag ctgcgagttc ctgctggctg gggccggagg ggccggggcg 180  
 ggggcccgcgc ccggaccgca tctcccccca cgggggtcgg tgcctgggga tcctgtccgc 240  
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 gatgacccta acttggctgc tgtcttggag aggctgggtg acataaagaa agggaataact 360  
 ctgctattgc agcatctgaa gaggatcatc tccgacctgt gtaaactcta taacctccct 420  
 cagcatccag atgtggagat gctggatcaa cccttgccag cagagcagtg cacacaggaa 480  
 gacgtgtctt cagaagatga agatgaggag atgcctgagg acacagaaga cttagatcac 540  
 tatgaaatga aagaggaaga gccagctgag ggcaagaaat ctgaagatga tggcattgga 600  
 aaagaaaact tggccatcct agagaaaatt aaaaagaacc agaggcaaga ttacttaaat 660  
 ggtgcagtgt ctggctcggg gcaggccact gaccggctga tgaaggagct cagggatata 720  
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 aactttccct ttgaccacc atttgtcagg gttgtgtctc cagtccctctc tggaggggtat 960  
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 ccttgagta tcacccttcc tccctcccca ggcaccactg gaccaattac ctttgaatgc 1260  
 tgtatttgga tctcacgctg cctctgtggt tccctccctc atttttcctg gacgtgatag 1320

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ctctgcctat tgcaggacaa tgatggctat tctaaacgct aaggaaaaaa aacaaacaca 1380
gaactgtttc aagtactcaa gactgactta cagaccaacc aaccaccttg ctggaaccct 1440
tgctagcagg cattcttata aaagaaactt tcgagcctcc ttatattgct ggaaactcag 1500
ctgtgctcca gactagagcc tccttaccta tgctatggat ttttaattta ttttctctta 1560
tttcatgtac actgcttttt ttggttacag tgtatgatgg atgtgtatga aaaaaatgta 1620
tctttgggaa aacaattaca gtttggttaat ttggaaaaaa aaaaaatgac tcattctttat 1680
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agtccactgt tggcttggtg ggagatgaga ggccgcattt gctgcttaag caaggggaac 1800
tggggctgag cacacaccgg ggtgcccccg gatttttcct caagggctct ggagcaacgg 1860
caccggcccc ttgggatgca                                     1880

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<210> 218

<211> 1024

<212> DNA

<213> Homo sapiens

<400> 218

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gctcagcagg accgaattca gcaagagatt gctgtgcaga accctctggt gtcagagcgg 180
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ttctatcggg ctttcggatt ctcccacttg gaggcactgc tggatgacag caaggagtgt 360
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gaattcacaa ttgaggattt ccacaacacg ttcattggacc tgattgagca ggtggagaag 480
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tgcaaggaga gcgaccacat ccacatcatt gcgctggccc aggcctcag cgtgtccatc 720
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acagaggttt ttctgtggtt gtaaattggtc ctatttcacc cccttcttcc tgtcacatga 960
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<210> 219

<211> 2383

<212> DNA

<213> Homo sapiens

<400> 219

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aagaaagtaa tgggtgtagca gtgtaagaga agtaaaagtc tgctagggga aactaatgaa 120
gcattttcct cattacactt ttgggttgat atatttcatt aagacagaac tagttctgtt 180
ttgcttttgct ttttagtgct tagtctgaga ggcaatgcga gaaacaaaa gtcttaggag 240
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aagcttgaag aggtgacaag agcaagctgt attcaattag acagttcaat aaatatgcaa 360
aaataaaaaa acacttatca atcatgagta tactgtttgt attctggaaa aagcaacata 420
tttcatgctt tgaatatatt ctcttgagaa tagtttttaa gttatttctt tttgtaacat 480
tcaaaagtaa aacacacata tataattcca tcaaggattc tctgtatgat taacattctg 540
tacaagtcaa acatgaccac atctatattg gaaagagagc actgagaagc aacagcagga 600
gaatgcatca cctgtgcctg tttcaggatg aacagttttg ttaagttcag cagatgaatg 660
taacaatgac cacttgtttc caaataccca gatgtttctt actggctcct cactaatcaa 720
taacacaagt gctaagtctt aagtatttaa aaaaacaaaa gactgcagggt gactccttct 780
ctctggtccc tttaccaaaag ctccaaatca cttatgacat taattacaat attctgcact 840

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ccaaaaaaat atgcaaacac aggtttgcta aatttttagtt actcagtga cctactaaat 900
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aaacatttta aaatcactca aacatgagaa ttgaaaatgt gtgtgcttat ttgggagagg 1020
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agcccccca gcaacaaacc atcttcccat ctgatcaatt ttaaataatt tttccatcga 2040
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gagacacacc agccttgtag ccaacatggt ggtggtgac caggtctacc gagcagatct 2280
gaaatgctcg gtccccggtc accttcgcct cgcagtttcc cttccggggc cctagcgtcg 2340
gcctcaaaga gcacagttcc tccggcgcac tgcagtgcgc aac 2383

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<210> 220

<211> 3209

<212> DNA

<213> Homo sapiens

<400> 220

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cttgatccgg gagtctttcc actggattca caatgacatc ctttcaagaa gtcccattgc 180
agacttccaa ctttgcccat gtcatctttc aaaatgtggc caagagttac cttcctaattg 240
cacacctgga atgtcattac accttaactc catatattca tccacatcca aaagattggg 300
ttggtatatt caaggttgga tggagtactg ctctgatta ttacacgttt ttatgggtccc 360
ctatgcctga acattatgtg gaaggatcaa cagtcaattg tgtactagca ttccaaggat 420
attaccttcc aaatgatgat ggagaatttt atcagttctg ttacgttacc cataaggggtg 480
aaattcgtgg agcaagtaca cctttccagt ttcgagcttc ttctccagtt gaagagctgc 540
ttactatgga agatgaagga aattctgaca tgtagtggt gaccacaaaa gcaggccttc 600
ttgagttgaa aattgagaaa accatgaaag aaaaagaaga actgttaaag ttaattgccg 660
ttctggaaaa agaaacagca caacttcgag aacaagttgg gagaatggaa agagaactta 720
accatgagaa agaaagatgt gaccaactgc aagcagaaca aaagggctct actgaagtaa 780
cacaaagctt aaaaatggaa aatgaagagt ttaagaagag gttcagtgat gctacatcca 840
aagccccatc gcttgaggaa gatatttgtt cagtaacaca taaagcaatt gaaaaagaaa 900
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<211> 1030

<212> DNA

<213> Homo sapiens

<400> 221

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 <211> 2369  
 <212> DNA  
 <213> Homo sapiens

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<211> 849

<212> DNA

<213> Homo sapiens

<400> 224

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<212> DNA

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<211> 1892
<212> DNA
<213> Homo sapiens
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 <212> DNA  
 <213> Homo sapiens

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 <212> DNA  
 <213> Homo sapiens

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<211> 765

<212> DNA

<213> Homo sapiens

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<210> 230

<211> 1611

<212> DNA

<213> Homo sapiens

<400> 230

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<211> 1473

<212> DNA

<213> Homo sapiens

<400> 231

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<210> 232

<211> 2503

<212> DNA

<213> Homo sapiens

&lt;400&gt; 232

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&lt;210&gt; 233

&lt;211&gt; 1756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 233

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&lt;210&gt; 234

&lt;211&gt; 1286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 234

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&lt;210&gt; 235

&lt;211&gt; 1230

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 235

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&lt;210&gt; 236

&lt;211&gt; 2328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 236

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<210> 237

<211> 1767

<212> DNA

<213> Homo sapiens

<400> 237

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<210> 238

<211> 2311

<212> DNA

<213> Homo sapiens

&lt;400&gt; 238

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&lt;210&gt; 239

&lt;211&gt; 1772

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 239

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&lt;210&gt; 240

&lt;211&gt; 2409

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 240

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<210> 241

<211> 2594

<212> DNA

<213> Homo sapiens

<220>

<221> modified\_base

<222> (2561)

<223> a, t, c or g

<400> 241

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<210> 242
<211> 1012
<212> DNA
<213> Homo sapiens

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<400> 242
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<210> 243
<211> 1206
<212> DNA
<213> Homo sapiens

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<222> (1)..(1206)
<223> a, t, c or g

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<210> 244

<211> 2514

<212> DNA

<213> Homo sapiens

<400> 244

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&lt;213&gt; Homo sapiens

&lt;400&gt; 246

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Asn Phe Ser Phe Lys Asp Asn Phe Pro Phe Asp Pro Pro Phe Val Arg  
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Ala Ala Glu Ala Gly Ala Ala Gly Gln Arg Leu Arg Ser Val Asn Cys  
 20 25 30

Leu Ala Tyr Asp Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln  
 35 40 45

Glu Ile Ala Val Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser  
 50 55 60

Val Leu Tyr Lys Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys  
 65 70 75 80

Ile Lys Asp Leu His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro  
 85 90 95

Asp Gly Asn Cys Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala  
 100 105 110



Leu	Leu	Asp	Asp	Ser	Lys	Glu	Leu	Gln	Arg	Phe	Lys	Ala	Val	Ser	Ala
115						120						125			
Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu	Phe	Thr	Ile
130						135				140					
Glu	Asp	Phe	His	Asn	Thr	Phe	Met	Asp	Leu	Ile	Glu	Gln	Val	Glu	Lys
145				150						155				160	
Gln	Thr	Ser	Val	Ala	Asp	Leu	Leu	Ala	Ser	Phe	Asn	Asp	Gln	Ser	Thr
				165				170						175	
Ser	Asp	Tyr	Leu	Val	Val	Tyr	Leu	Arg	Leu	Leu	Thr	Ser	Gly	Tyr	Leu
		180						185				190			
Gln	Arg	Glu	Ser	Lys	Phe	Phe	Glu	His	Phe	Ile	Glu	Gly	Gly	Arg	Thr
		195				200						205			
Val	Lys	Glu	Phe	Cys	Gln	Gln	Glu	Val	Glu	Pro	Met	Cys	Lys	Glu	Ser
210						215				220					
Asp	His	Ile	His	Ile	Ile	Ala	Leu	Ala	Gln	Ala	Leu	Ser	Val	Ser	Ile
225				230						235				240	
Gln	Val	Glu	Tyr	Met	Asp	Arg	Gly	Glu	Gly	Gly	Thr	Thr	Asn	Pro	His
				245				250						255	
Ile	Phe	Pro	Glu	Gly	Ser	Glu	Pro	Lys	Val	Tyr	Leu	Leu	Tyr	Arg	Pro
		260						265				270			
Gly	His	Tyr	Asp	Ile	Leu	Tyr	Lys								
275						280									

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<210> 250
<211> 244
<212> PRT
<213> Homo sapiens
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<400> 250
Asp His Leu Gln Pro Gln Lys Asn Leu Cys Thr Cys Leu Ala Pro Gly
  1                               10                      15
Arg Gly Gly Gln Gln Gly Ser Ser Gly Leu Glu Pro Ala Leu Phe Val
                20                      25                      30
Glu Asp Ile Val Val Ser Arg Pro Val Glu Lys Val Asp Leu Gly Leu
          35                      40                      45
Gly Ala Leu Arg Glu Asp Val Arg Ile Gly Gly Ala Ala Leu Ala Ala
      50                      55                      60
Val His Val Leu His Leu Asp Gly His Ala Glu Gly Leu Gly Gln Arg
    65                      70                      75                      80
Asn Asp Val Asp Val Val Ala Leu Leu Ala His Gly Leu His Leu Leu
          85                      90                      95

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Leu Ala Glu Leu Leu Asp Ser Pro Ser Thr Leu Asp Glu Val Leu Glu  
 100 105 110  
 Glu Leu Ala Leu Ala Leu Gln Val Ala Arg Gly Glu Gln Pro Gln Val  
 115 120 125  
 Asp His Lys Val Val Gly Gly Ala Leu Val Ile Glu Gly Gly Gln Gln  
 130 135 140  
 Val Gly Asp Arg Gly Leu Leu Leu His Leu Leu Asn Gln Val His Glu  
 145 150 155 160  
 Arg Val Val Glu Ile Leu Asn Cys Glu Phe Ser Glu Ala Leu Gly His  
 165 170 175  
 Gln Val Phe Leu Ala Leu Gly Arg His Ser Leu Glu Pro Leu Gln Leu  
 180 185 190  
 Leu Ala Val Ile Gln Gln Cys Leu Gln Val Gly Glu Ser Glu Ser Pro  
 195 200 205  
 Ile Glu Thr Val Ala Val Arg Pro Gly Leu Ala Asp Val Arg Val Leu  
 210 215 220  
 Phe Val Glu Val Leu Asp Leu Leu Leu Ile Asp Val Val Ile Phe Ser  
 225 230 235 240  
 Ile Leu Leu Val

<210> 251  
 <211> 293  
 <212> PRT  
 <213> Homo sapiens

<400> 251  
 Met Leu Ala Ala Arg Leu Val Cys Leu Arg Thr Leu Pro Ser Arg Val  
 1 5 10 15  
 Phe His Pro Ala Phe Thr Lys Ala Ser Pro Val Val Lys Asn Ser Ile  
 20 25 30  
 Thr Lys Asn Gln Trp Leu Leu Thr Pro Ser Arg Glu Tyr Ala Thr Lys  
 35 40 45  
 Thr Arg Ile Gly Ile Arg Arg Gly Arg Thr Gly Gln Glu Leu Lys Glu  
 50 55 60  
 Ala Ala Leu Glu Pro Ser Met Glu Lys Ile Phe Lys Ile Asp Gln Met  
 65 70 75 80  
 Gly Arg Trp Phe Val Ala Gly Gly Ala Ala Val Gly Leu Gly Ala Leu  
 85 90 95  
 Cys Tyr Tyr Gly Leu Gly Leu Ser Asn Glu Ile Gly Ala Ile Glu Lys  
 100 105 110

Ala Val Ile Trp Pro Gln Tyr Val Lys Asp Arg Ile His Ser Thr Tyr  
115 120 125

Met Tyr Leu Ala Gly Ser Ile Gly Leu Thr Ala Leu Ser Ala Ile Ala  
130 135 140

Ile Ser Arg Thr Pro Val Leu Met Asn Phe Met Met Arg Gly Ser Trp  
145 150 155 160

Val Thr Ile Gly Val Thr Phe Ala Ala Met Val Gly Ala Gly Met Leu  
165 170 175

Val Arg Ser Ile Pro Tyr Asp Gln Ser Pro Gly Pro Lys His Leu Ala  
180 185 190

Trp Leu Leu His Ser Gly Val Met Gly Ala Val Val Ala Pro Leu Thr  
195 200 205

Ile Leu Gly Gly Pro Leu Leu Ile Arg Ala Ala Trp Tyr Thr Ala Gly  
210 215 220

Ile Val Gly Gly Leu Ser Thr Val Ala Met Cys Ala Pro Ser Glu Lys  
225 230 235 240

Phe Leu Asn Met Gly Ala Pro Leu Gly Val Gly Leu Gly Leu Val Phe  
245 250 255

Val Ser Ser Leu Gly Ser Met Phe Leu Pro Pro Thr Thr Arg Gly Trp  
260 265 270

Cys His Ser Leu Leu Ser Gly Asn Val Arg Trp Ile Ser Ser Phe Gln  
275 280 285

His Val Pro Ser Val  
290

<210> 252  
<211> 563  
<212> PRT  
<213> Homo sapiens

<400> 252  
Met Glu Arg Glu Leu Asn His Glu Lys Glu Arg Cys Asp Gln Leu Gln  
1 5 10 15

Ala Glu Gln Lys Gly Leu Thr Glu Val Thr Gln Ser Leu Lys Met Glu  
20 25 30

Asn Glu Glu Phe Lys Lys Arg Phe Ser Asp Ala Thr Ser Lys Ala His  
35 40 45

Gln Leu Glu Glu Asp Ile Val Ser Val Thr His Lys Ala Ile Glu Lys  
50 55 60

Glu Thr Glu Leu Asp Ser Leu Lys Asp Lys Leu Lys Lys Ala Gln His  
65 70 75 80



Gln Val Lys Ile Ala Glu Asn Val Lys Leu Glu Leu Ala Glu Val Gln  
 385 390 395 400  
 Asp Asn Tyr Lys Glu Leu Lys Arg Ser Leu Glu Asn Pro Ala Glu Arg  
 405 410 415  
 Lys Met Glu Asp Gly Ala Asp Gly Ala Phe Tyr Pro Asp Glu Ile Gln  
 420 425 430  
 Arg Pro Pro Val Arg Val Pro Ser Trp Gly Leu Glu Asp Asn Val Val  
 435 440 445  
 Cys Ser Gln Pro Ala Arg Asn Phe Ser Arg Pro Asp Gly Leu Glu Asp  
 450 455 460  
 Ser Glu Asp Ser Lys Glu Asp Glu Asn Val Pro Thr Ala Pro Asp Pro  
 465 470 475 480  
 Pro Ser Gln His Leu Arg Gly His Gly Thr Gly Phe Cys Phe Asp Ser  
 485 490 495  
 Ser Phe Asp Val His Lys Lys Cys Pro Leu Cys Glu Leu Met Phe Pro  
 500 505 510  
 Pro Asn Tyr Asp Gln Ser Lys Phe Glu Glu His Val Glu Ser His Trp  
 515 520 525  
 Lys Val Cys Pro Met Cys Ser Glu Gln Phe Pro Pro Asp Tyr Asp Gln  
 530 535 540  
 Gln Val Phe Glu Arg His Val Gln Thr His Phe Asp Gln Asn Val Leu  
 545 550 555 560  
 Asn Phe Asp

<210> 253  
 <211> 249  
 <212> PRT  
 <213> Homo sapiens

<400> 253  
 Trp Thr Gly Thr Gly Arg Gly Ala Val Ala Ile Met Ala Asp Pro Asp  
 1 5 10 15  
 Pro Arg Tyr Pro Arg Ser Ser Ile Glu Asp Asp Phe Asn Tyr Gly Ser  
 20 25 30  
 Ser Val Ala Ser Ala Thr Val His Ile Arg Met Ala Phe Leu Arg Lys  
 35 40 45  
 Val Tyr Ser Ile Leu Ser Leu Gln Val Leu Leu Thr Thr Val Thr Ser  
 50 55 60  
 Thr Val Phe Leu Tyr Phe Glu Ser Val Arg Thr Phe Val His Glu Ser  
 65 70 75 80

Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly Ser Leu Gly Leu Ile Phe  
85 90 95

Ala Leu Thr Leu Asn Arg His Lys Tyr Pro Leu Asn Leu Tyr Leu Leu  
100 105 110

Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr Val Ala Val Val Val Thr  
115 120 125

Phe Tyr Asp Val Tyr Ile Ile Leu Gln Ala Phe Ile Leu Thr Thr Thr  
130 135 140

Val Phe Phe Gly Leu Thr Val Tyr Thr Leu Gln Ser Lys Lys Asp Phe  
145 150 155 160

Ser Lys Phe Gly Ala Gly Leu Phe Ala Leu Leu Trp Ile Leu Cys Leu  
165 170 175

Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser Glu Ile Met Glu Leu Val  
180 185 190

Leu Ala Ala Ala Gly Ala Leu Leu Phe Cys Gly Phe Ile Ile Tyr Asp  
195 200 205

Thr His Ser Leu Met His Lys Leu Ser Pro Glu Glu Tyr Val Leu Ala  
210 215 220

Ala Ile Ser Leu Tyr Leu Asp Ile Ile Asn Leu Phe Leu His Leu Leu  
225 230 235 240

Arg Phe Leu Glu Ala Val Asn Lys Lys  
245

<210> 254

<211> 151

<212> PRT

<213> Homo sapiens

<400> 254

Arg Lys Lys Gly Glu Thr Glu Arg Glu Leu Ser Ala Ser Thr Gln Thr  
1 5 10 15

Leu Ser His Leu Gln Gly His Leu Pro Ser Trp Pro Arg Pro Ala Pro  
20 25 30

Thr Val Thr Ser Ala Ser Arg Arg Phe Ile Ile Lys Lys Asn Gln Lys  
35 40 45

Gln Ser Gln Asn Gln Asn Lys Ile Gln Lys Glu Lys Thr Trp Gly Asn  
50 55 60

Gly Met Arg Lys Arg Gly Gly Glu Glu Gly Arg Arg Ala Gly Leu Trp  
65 70 75 80

Met His Asn Ser Arg Ala Arg Gly Leu Gly Arg Lys Ile Pro Gln Arg  
85 90 95

Pro Ala Ala Cys Val Ala Leu Ala Arg His Val Val Phe Gly Gly Arg  
                   100                  105                  110

Leu Pro Ile His Pro Val Glu Ile Leu Val Ala Gly Leu Leu Gly Gly  
                   115                  120                  125

Val Lys Pro Val Ser Asp Arg Gln Ala Gly Lys Gly Leu Gly Asp Gly  
                   130                  135                  140

Gly Cys Gly Arg Glu Arg Val  
 145                  150

<210> 255

<211> 150

<212> PRT

<213> Homo sapiens

<400> 255

Arg His Ala Gly Gly Gly Ala Leu Gly Asn Leu Pro Pro Gln Pro Pro  
   1                  5                  10                  15

Gly Ser Gly Val Met His Pro Glu Thr Cys Pro Ser Thr Phe Leu Ala  
                   20                  25                  30

Ser Pro Leu Pro His Ser Ile Ala Pro Gly Leu Phe Leu Leu Asp Phe  
                   35                  40                  45

Val Leu Val Leu Ala Leu Phe Leu Ile Phe Phe Tyr Tyr Glu Ser Pro  
                   50                  55                  60

Gly Arg Arg Gly Asp Ser Gly Ser Trp Pro Gly Pro Gly Arg Gln Val  
   65                  70                  75                  80

Ala Leu Glu Met Gly Lys Cys Leu Cys Arg Gly Ala Glu Leu Ser Leu  
                   85                  90                  95

Cys Phe Ser Phe Phe Pro Leu Leu Leu Pro Leu His Thr Pro Val Ala  
                   100                  105                  110

Gly Arg Asn Leu Gly Phe Pro Glu Ser Leu Gly Val Pro Pro Phe Leu  
                   115                  120                  125

Pro His Pro Gly Gly Thr Pro Arg Ala Pro Gly Leu Phe Leu Leu Leu  
                   130                  135                  140

Phe Ser Phe Trp Ala Val  
 145                  150

<210> 256

<211> 275

<212> PRT

<213> Homo sapiens

<400> 256

Gly Arg Pro Gly Gln Ser Pro Ala Gly Ala Glu Glu Pro Gly Pro Arg  
   1                  5                  10                  15

Asp Ser Ser Ala Val Ile Thr Gln Ile Ser Lys Glu Glu Ala Arg Gly  
                   20                  25                  30  
 Pro Leu Arg Gly Lys Gly Asp Gln Lys Ser Ala Ala Ser Gln Lys Pro  
                   35                  40                  45  
 Arg Ser Arg Gly Ile Leu His Ser Leu Phe Cys Cys Val Cys Arg Asp  
                   50                  55                  60  
 Asp Gly Glu Ala Leu Pro Ala His Ser Gly Ala Pro Leu Leu Val Glu  
                   65                  70                  75                  80  
 Glu Asn Gly Ala Ile Pro Lys Thr Pro Val Gln Tyr Leu Leu Pro Glu  
                   85                  90                  95  
 Ala Lys Ala Gln Asp Ser Asp Lys Ile Cys Val Val Ile Asp Leu Asp  
                   100                  105                  110  
 Glu Thr Leu Val His Ser Ser Phe Lys Pro Val Asn Asn Ala Asp Phe  
                   115                  120                  125  
 Ile Ile Pro Val Glu Ile Asp Gly Val Val His Gln Val Tyr Val Leu  
                   130                  135                  140  
 Lys Arg Pro His Val Asp Glu Phe Leu Gln Arg Met Gly Glu Leu Phe  
                   145                  150                  155                  160  
 Glu Cys Val Leu Phe Thr Ala Ser Leu Ala Lys Tyr Ala Asp Pro Val  
                   165                  170                  175  
 Ala Asp Leu Leu Asp Lys Trp Gly Ala Phe Arg Ala Arg Leu Phe Arg  
                   180                  185                  190  
 Glu Ser Cys Val Phe His Arg Gly Asn Tyr Val Lys Asp Leu Ser Arg  
                   195                  200                  205  
 Leu Gly Arg Asp Leu Arg Arg Val Leu Ile Leu Asp Asn Ser Pro Ala  
                   210                  215                  220  
 Ser Tyr Val Phe His Pro Asp Asn Ala Val Pro Val Ala Ser Trp Phe  
                   225                  230                  235                  240  
 Asp Asn Met Ser Asp Thr Glu Leu His Asp Leu Leu Pro Phe Phe Glu  
                   245                  250                  255  
 Gln Leu Ser Arg Val Asp Asp Val Tyr Ser Val Leu Arg Gln Pro Arg  
                   260                  265                  270  
 Pro Gly Ser  
                   275

&lt;210&gt; 257

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 257

Met Phe Tyr Leu Ala Ala Val Ser Asp Phe Tyr Val Pro Val Ser  
 1 5 10 15  
 Glu Met Pro Glu His Lys Ile Gln Ser Ser Gly Gly Pro Leu Gln Ile  
 20 25 30  
 Thr Met Lys Met Val Pro Lys Leu Leu Ser Pro Leu Val Lys Asp Trp  
 35 40 45  
 Ala Pro Lys Ala Phe Ile Ile Ser Phe Lys Leu Glu Thr Asp Pro Ala  
 50 55 60  
 Ile Val Ile Asn Arg Ala Arg Lys Ala Leu Glu Ile Tyr Gln His Gln  
 65 70 75 80  
 Val Val Val Ala Asn Ile Leu Glu Ser Arg Gln Ser Phe Val Phe Ile  
 85 90 95  
 Val Thr Lys Asp Ser Glu Thr Lys Leu Leu Leu Ser Glu Glu Glu Ile  
 100 105 110  
 Glu Lys Gly Val Glu Ile Glu Glu Lys Ile Val Asp Asn Leu Gln Ser  
 115 120 125  
 Arg His Thr Ala Phe Ile Gly Asp Arg Asn  
 130 135

&lt;210&gt; 258

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 258

Pro Tyr Arg Gln Gly Cys Pro Gly Ala Ala Gly Gln Ala Pro Gly Ala  
 1 5 10 15  
 Pro Pro Gly Ser Tyr Tyr Pro Gly Leu Pro Ser Gly Thr Pro Gly Gly  
 20 25 30  
 Pro Tyr Gly Gly Ala Ala Pro Gly Gly Pro Tyr Gly Gln Pro Pro Pro  
 35 40 45  
 Ser Ser Tyr Gly Ala Gln Gln Pro Gly Leu Tyr Gly Gln Gly Gly Ala  
 50 55 60  
 Pro Pro Asn Val Asp Pro Glu Ala Tyr Ser Trp Phe Gln Ser Val Asp  
 65 70 75 80  
 Ser Asp His Ser Gly Tyr Ile Ser Met Lys Glu Leu Lys Gln Ala Leu  
 85 90 95  
 Val Asn Cys Asn Trp Ser Ser Phe Asn Asp Glu Thr Cys Leu Met Met  
 100 105 110  
 Ile Asn Met Phe Asp Lys Thr Lys Ser Gly Arg Ile Asp Val Tyr Gly  
 115 120 125

Phe Ser Ala Leu Trp Lys Phe Ile Gln Gln Trp Lys Asn Leu Phe Gln  
 130 135 140  
 Gln Tyr Asp Arg Asp Arg Ser Gly Ser Ile Ser Tyr Thr Glu Leu Gln  
 145 150 155 160  
 Gln Ala Leu Ser Gln Met Gly Tyr Asn Leu Ser Pro Gln Phe Thr Gln  
 165 170 175  
 Leu Leu Val Ser Arg Tyr Cys Pro Arg Ser Ala Asn Pro Ala Met Gln  
 180 185 190  
 Leu Asp Arg Phe Ile Gln Val Cys Thr Gln Leu Gln Val Leu Thr Glu  
 195 200 205  
 Ala Phe Arg Glu Lys Asp Thr Ala Val Gln Gly Asn Ile Arg Leu Ser  
 210 215 220  
 Phe Glu Asp Phe Val Thr Met Thr Ala Ser Arg Met Leu  
 225 230 235

<210> 259  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 259  
 Thr Asn Ile Cys Leu Leu Ser Gly Ala Ser Pro Lys Val Thr Asn Gly  
 1 5 10 15  
 Trp Ala Gln Ile Asn Phe Ser Phe Ala Ser His Arg Val Ala His Cys  
 20 25 30  
 Gly Lys Pro Glu Leu Val Arg Thr Pro Val Cys Val Phe Leu Ile His  
 35 40 45  
 Thr Asn His Asn Lys Gln Val Cys Thr His Leu Tyr Glu Pro His Ala  
 50 55 60  
 Lys Thr Arg His Ser Gln Arg Ser Val Thr Arg Val Gln Gln Arg Asn  
 65 70 75 80  
 Ser Arg Phe Asp Gln Asn Arg Pro Cys Cys Leu Leu Asn Cys Gln Leu  
 85 90 95  
 Pro Leu Lys Asn Leu Gln Lys Lys Gly His Tyr Lys Asn Ser  
 100 105 110

<210> 260  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 260  
 Phe Val Lys Ile Leu Lys Phe Gly Pro Leu Arg Ile Ile Leu Asn Glu  
 1 5 10 15

Ile Tyr Arg Leu Thr Cys Glu Asn Ile Phe His Arg Leu Ser Leu Gly  
                   20                  25                  30

Leu Phe Ile Arg Lys Leu Phe Val Cys Pro Pro Val Gly Thr Phe Gly  
           35                  40                  45

Tyr Leu Ile Leu Pro Phe Gln Ile Val Lys Ala His Arg Gly Val Phe  
       50                  55                  60

Trp Asn His Leu Leu Ser His Phe Leu Lys Ser Tyr Ser Ile Val Ser  
       65                  70                  75                  80

Val Asn Ile

<210> 261  
 <211> 196  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> MOD\_RES  
 <222> (65)  
 <223> Any naturally occurring amino acid

<220>  
 <221> MOD\_RES  
 <222> (165)  
 <223> Any naturally occurring amino acid

<400> 261  
 Pro Gln Thr Thr Gln Cys Val Arg Arg Ala Gly Leu Trp Val Asn Ser  
       1                  5                  10                  15

His Ile His Thr Gln Gly Arg Gly Lys His Thr Gln Val Gln Ser Ser  
           20                  25                  30

Gln Trp Cys Arg Pro Asp Leu Leu Ser Arg Gly Cys Tyr Gly Cys Pro  
       35                  40                  45

Ser Ala Ser Pro Glu Gln Pro Gly Gln Pro Ala Pro Pro Pro Arg Leu  
       50                  55                  60

Xaa Gln Glu Gly Glu Leu Cys Pro Gly Glu Glu Thr Asp Arg Leu Gly  
       65                  70                  75                  80

Asp Lys Thr Pro Ile Ala Gly Thr Cys Thr Ala Ala Ala Thr Ala Pro  
           85                  90                  95

Arg Thr Gly His Gly Asp Gly Thr Gly Arg Glu Pro His Cys Pro Leu  
           100                  105                  110

Ser Val Cys Leu Trp Phe Cys Pro Gly Pro Ala His Leu Glu Pro Arg  
       115                  120                  125

Gln Thr Gly Gly Ile Glu Gln Gly Pro Gly Pro Asp Ser Pro Leu Ala  
 130 135 140  
 Arg Cys Asp Trp Lys Arg Leu Met Pro Gly Gln His Gln Ala Phe Cys  
 145 150 155 160  
 Lys Ser Gln Ser Gln Cys Ala Glu Ser Ala Ser Thr Ala Cys Ala Val  
 165 170 175  
 Ala Pro Gln Asp Glu Val Thr Ser Arg Thr Gly Gly Phe Met Gln Thr  
 180 185 190  
 His Arg His Cys  
 195

<210> 262

<211> 190

<212> PRT

<213> Homo sapiens

<220>

<221> MOD\_RES

<222> (165)

<223> Any naturally occurring amino acid

<400> 262

Asp Gln Leu Gly Ser Gly Gly His Phe Ser Leu His Arg Leu Pro Glu  
 1 5 10 15  
 Gln Thr Glu Glu Ser Ser Leu Ile Val Ala Glu Pro Ser Leu Ser Pro  
 20 25 30  
 Ser Ala Val Ser Val Cys Leu His Lys Pro Ser Cys Pro Gly Arg Asp  
 35 40 45  
 Phe Ile Leu Arg Ser His Ser Thr Gly Arg Ala Gly Thr Phe Cys Thr  
 50 55 60  
 Leu Ala Leu Gly Leu Ala Glu Gly Leu Val Leu Pro Trp His Gln Pro  
 65 70 75 80  
 Leu Pro Val Thr Ser Gly Gln Arg Ala Val Trp Thr Trp Ala Leu Leu  
 85 90 95  
 Asn Ala Thr Cys Leu Pro Gly Leu Gln Val Gly Arg Thr Arg Thr Glu  
 100 105 110  
 Pro Gln Ala His Thr Glu Gly Ala Val Trp Leu Pro Ala Cys Pro Ile  
 115 120 125  
 Pro Met Pro Arg Pro Arg Gly Cys Gly Cys Cys Cys Ala Cys Pro Cys  
 130 135 140  
 Asp Gly Ser Leu Val Ser Gln Pro Val Ser Phe Leu Pro Arg Ala Glu  
 145 150 155 160

Leu Pro Phe Leu Xaa Glu Ser Gly Arg Arg Cys Arg Leu Ser Trp Leu  
165 170 175

Leu Trp Gly Ser Arg Gly Thr Ala Ile Thr Pro Pro Gly Gln  
180 185 190

<210> 263

<211> 244

<212> PRT

<213> Homo sapiens

<400> 263

Glu Lys Met Glu Ala Phe Gly Glu Gly Ala Gly Trp Glu Asp Phe Phe  
1 5 10 15

Ser Thr Gln Thr Leu Thr Phe Gln Ser Ile Leu Gln Met Lys Asn Ala  
20 25 30

Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr Thr Tyr Ile Asn  
35 40 45

Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile Glu Met Gln Ala  
50 55 60

Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr Gln Tyr Ser Thr  
65 70 75 80

Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn Glu Asp Glu Pro  
85 90 95

Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn Ser Val Val Asn  
100 105 110

Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu Pro Ser Phe Lys  
115 120 125

Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala Ile Lys Thr Ser  
130 135 140

Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp Lys Lys Arg Ala  
145 150 155 160

Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu Gln Val Ala Arg  
165 170 175

Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys Gln Ala Arg Gln  
180 185 190

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Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala Thr Cys Ser Ser  
      195                      200                        205
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Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp Thr Ser Arg Ser  
210 215 220

Pro Arg Gln Gly Val Gln Pro Arg His Leu Ser Thr Leu Ser Cys Met  
225 230 235 240

Leu Asn Trp Ala

<210> 264  
 <211> 220  
 <212> PRT  
 <213> Homo sapiens

<400> 264  
 Gly Phe Arg Pro Ala Arg Cys Asp Pro Val Pro Leu Pro Thr Thr Arg  
   1                  5                  10                  15  
 Ser Val Ala Gly Leu Pro Val Gly Arg Val Arg Gln Leu Ser Arg Pro  
                   20                  25                  30  
 Leu Leu Gly Pro Asp Thr Gly Ser Val Ala Asn Ile Phe Lys Gly Leu  
                   35                  40                  45  
 Val Ile Leu Pro Glu Met Ser Leu Val Ile Arg Asn Leu Gln Arg Val  
                   50                  55                  60  
 Ile Pro Ile Arg Arg Ala Pro Leu Arg Ser Lys Ile Glu Ile Val Arg  
   65                  70                  75                  80  
 Arg Ile Leu Gly Val Gln Lys Phe Asp Leu Gly Ile Ile Cys Val Asp  
                   85                  90                  95  
 Asn Lys Asn Ile Gln His Ile Asn Arg Ile Tyr Arg Asp Arg Asn Val  
                   100                  105                  110  
 Pro Thr Asp Val Leu Ser Phe Pro Phe His Glu His Leu Lys Ala Gly  
                   115                  120                  125  
 Glu Phe Pro Gln Pro Asp Phe Pro Asp Asp Tyr Asn Leu Gly Asp Ile  
                   130                  135                  140  
 Phe Leu Gly Val Glu Tyr Ile Phe His Gln Cys Lys Glu Asn Glu Asp  
   145                  150                  155                  160  
 Tyr Asn Asp Val Leu Thr Val Thr Ala Thr His Gly Leu Cys His Leu  
                   165                  170                  175  
 Leu Gly Phe Thr His Gly Thr Glu Ala Glu Trp Gln Gln Met Phe Gln  
                   180                  185                  190  
 Lys Glu Lys Ala Val Leu Asp Glu Leu Gly Arg Arg Thr Gly Thr Arg  
                   195                  200                  205  
 Leu Gln Ala Leu Thr Arg Gly Leu Phe Gly Gly Ser  
                   210                  215                  220

<210> 265  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 265

Phe Phe Phe Leu Arg Ser Phe Val Ile Tyr Leu Cys Ala Thr Pro Ala  
 1 5 10 15  
 Pro Arg Ser Leu His Pro Ser Arg Val Pro Leu Ser Glu Gly Thr Arg  
 20 25 30  
 Pro Ser Ala Pro Ser Glu Glu Ala Pro Gly Gln Gly Leu Gln Pro Gly  
 35 40 45  
 Pro Arg Ala Ser Ala Gln Leu Val Gln His Arg Leu Leu Leu Leu Glu  
 50 55 60  
 His Leu Leu Pro Leu Cys Leu Arg Ala Val Cys Glu Ser Gln Gln Val  
 65 70 75 80  
 Thr Glu Ser Val Gly Gly Arg His Ser Gln Asp Val Ile Val Ile Phe  
 85 90 95  
 Ile Phe Phe Thr Leu Met Glu Asp Ile Leu His Ser  
 100 105

&lt;210&gt; 266

&lt;211&gt; 371

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 266

Met Ser Phe Arg Lys Val Asn Ile Ile Ile Leu Val Leu Ala Val Ala  
 1 5 10 15  
 Leu Phe Leu Leu Val Leu His His Asn Phe Leu Ser Leu Ser Ser Leu  
 20 25 30  
 Leu Arg Asn Glu Val Thr Asp Ser Gly Ile Val Gly Pro Gln Pro Ile  
 35 40 45  
 Asp Phe Val Pro Asn Ala Leu Arg His Ala Val Asp Gly Arg Gln Glu  
 50 55 60  
 Glu Ile Pro Val Val Ile Ala Ala Ser Glu Asp Arg Leu Gly Gly Ala  
 65 70 75 80  
 Ile Ala Ala Ile Asn Ser Ile Gln His Asn Thr Arg Ser Asn Val Ile  
 85 90 95  
 Phe Tyr Ile Val Thr Leu Asn Asn Thr Ala Asp His Leu Arg Ser Trp  
 100 105 110  
 Leu Asn Ser Asp Ser Leu Lys Ser Ile Arg Tyr Lys Ile Val Asn Phe  
 115 120 125  
 Asp Pro Lys Leu Leu Glu Gly Lys Val Lys Glu Asp Pro Asp Gln Gly  
 130 135 140  
 Glu Ser Met Lys Pro Leu Thr Phe Ala Arg Phe Tyr Leu Pro Ile Leu  
 145 150 155 160

Val Pro Ser Ala Lys Lys Ala Ile Tyr Met Asp Asp Asp Val Ile Val  
 165 170 175  
 Gln Gly Asp Ile Leu Ala Leu Tyr Asn Thr Ala Leu Lys Pro Gly His  
 180 185 190  
 Ala Ala Ala Phe Ser Glu Asp Cys Asp Ser Ala Ser Thr Lys Val Val  
 195 200 205  
 Ile Arg Gly Ala Gly Asn Gln Tyr Asn Tyr Ile Gly Tyr Leu Asp Tyr  
 210 215 220  
 Lys Lys Glu Arg Ile Arg Lys Leu Ser Met Lys Ala Ser Thr Cys Ser  
 225 230 235 240  
 Phe Asn Pro Gly Val Phe Val Ala Asn Leu Thr Glu Trp Lys Arg Gln  
 245 250 255  
 Asn Ile Thr Asn Gln Leu Glu Lys Trp Met Lys Leu Asn Val Glu Glu  
 260 265 270  
 Gly Leu Tyr Ser Arg Thr Leu Ala Gly Ser Ile Thr Thr Pro Pro Leu  
 275 280 285  
 Leu Ile Val Phe Tyr Gln Gln His Ser Thr Ile Asp Pro Met Trp Asn  
 290 295 300  
 Val Arg His Leu Gly Ser Ser Ala Gly Lys Arg Tyr Ser Pro Gln Phe  
 305 310 315 320  
 Val Lys Ala Ala Lys Leu Leu His Trp Asn Gly His Leu Lys Pro Trp  
 325 330 335  
 Gly Arg Thr Ala Ser Tyr Thr Asp Val Trp Glu Lys Trp Tyr Ile Pro  
 340 345 350  
 Asp Pro Thr Gly Lys Phe Asn Leu Ile Arg Arg Tyr Thr Glu Ile Ser  
 355 360 365  
 Asn Ile Lys  
 370

&lt;210&gt; 267

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 267

Met Cys Leu Leu Ser Gln Gln Ser Pro Ala Ala Ser Ser Leu Glu Gly  
 1 5 10 15  
 Ala Ile Trp Arg Arg Ala Gly Thr Gln Thr Arg Ala Leu Asp Ala Ile  
 20 25 30  
 Leu Tyr His Pro Gln Gln Ser His Leu Val Gly Ser Thr Ala Leu Gly  
 35 40 45



Leu Thr Leu Pro Leu Leu Tyr Pro Arg Glu Pro Glu Ala Gln Gly Trp  
 50 55 60

Lys Asp Pro Val Ala Gly Gly Gly  
 65 70

<210> 268

<211> 137

<212> PRT

<213> Homo sapiens

<400> 268

Val Pro Pro Cys Pro Gln Leu Arg Glu Leu Cys Pro Gly Val Asn Asn  
 1 5 10 15

Gln Pro Tyr Leu Cys Glu Ser Gly His Cys Cys Gly Glu Thr Gly Cys  
 20 25 30

Cys Thr Tyr Tyr Tyr Glu Leu Trp Trp Phe Trp Leu Leu Trp Thr Val  
 35 40 45

Leu Ile Leu Phe Ser Cys Cys Cys Ala Phe Arg His Arg Arg Ala Lys  
 50 55 60

Leu Arg Leu Gln Gln Gln Arg Gln Val Glu Ile Asn Leu Leu Ala  
 65 70 75 80

Tyr His Gly Ala Cys His Gly Ala Gly Pro Phe Pro Thr Gly Ser Leu  
 85 90 95

Leu Asp Leu Arg Phe Leu Ser Thr Phe Lys Pro Pro Ala Tyr Glu Asp  
 100 105 110

Val Val His Arg Pro Gly Thr Thr Ser Pro Pro Leu Tyr Cys Gly Pro  
 115 120 125

Lys Ala Pro Leu Glu Val Val Ser Ser  
 130 135

<210> 269

<211> 308

<212> PRT

<213> Homo sapiens

<400> 269

Lys His Ala Thr Glu Gln Glu Lys Thr Glu Glu Gly Leu Gly Pro Asn  
 1 5 10 15

Val Lys Gly Ile Val Thr Met Leu Met Leu Met Leu Leu Met Met Phe  
 20 25 30

Ala Val His Cys Thr Trp Val Thr Ser Asn Ala Tyr Ser Ser Pro Ser  
 35 40 45

Val Val Leu Ala Ser Tyr Asn His Asp Gly Thr Arg Asn Ile Leu Asp  
 50 55 60  
 Asp Phe Arg Glu Ala Tyr Phe Trp Leu Arg Gln Asn Thr Asp Glu His  
 65 70 75 80  
 Ala Arg Val Met Ser Trp Trp Asp Tyr Gly Tyr Gln Ile Ala Gly Met  
 85 90 95  
 Ala Asn Arg Thr Thr Leu Val Asp Asn Asn Thr Trp Asn Asn Ser His  
 100 105 110  
 Ile Ala Leu Val Gly Lys Ala Met Ser Ser Asn Glu Thr Ala Ala Tyr  
 115 120 125  
 Lys Ile Met Arg Thr Leu Asp Val Asp Tyr Val Leu Val Ile Phe Gly  
 130 135 140  
 Gly Val Ile Gly Tyr Ser Gly Asp Asp Ile Asn Lys Phe Leu Trp Met  
 145 150 155 160  
 Val Arg Ile Ala Glu Gly Glu His Pro Lys Asp Ile Arg Glu Ser Asp  
 165 170 175  
 Tyr Phe Thr Pro Gln Gly Glu Phe Arg Val Asp Lys Ala Gly Ser Pro  
 180 185 190  
 Thr Leu Leu Asn Cys Leu Met Tyr Lys Met Ser Tyr Tyr Arg Phe Gly  
 195 200 205  
 Glu Met Gln Leu Asp Phe Arg Thr Pro Pro Gly Phe Asp Arg Thr Arg  
 210 215 220  
 Asn Ala Glu Ile Gly Asn Lys Asp Ile Lys Phe Lys His Leu Glu Glu  
 225 230 235 240  
 Ala Phe Thr Ser Glu His Trp Leu Val Arg Ile Tyr Lys Val Lys Ala  
 245 250 255  
 Pro Asp Asn Arg Glu Thr Leu Asp His Lys Pro Arg Val Thr Asn Ile  
 260 265 270  
 Phe Pro Lys Gln Lys Tyr Leu Ser Lys Lys Thr Thr Lys Arg Lys Arg  
 275 280 285  
 Gly Tyr Ile Lys Asn Lys Leu Val Phe Lys Lys Gly Lys Lys Ile Ser  
 290 295 300  
 Lys Lys Thr Val  
 305

&lt;210&gt; 270

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 270

Ile Pro Glu Asp Pro His Ile Asp Glu Ser Lys Ala Lys His Gln Ala  
 1 5 10 15

Ile Ile Met Ser Thr Ser Leu Arg Val Ser Pro Ser Ile His Gly Tyr  
 20 25 30

His Phe Asp Thr Ala Ser Arg Lys Lys Ala Val Gly Asn Ile Phe Glu  
 35 40 45

Asn Thr Asp Gln Glu Ser Leu Glu Arg Leu Phe Arg Asn Ser Gly Asp  
 50 55 60

Lys Lys Ala Glu Glu Arg Ala Lys Ile Ile Phe Ala Ile Asp Gln Asp  
 65 70 75 80

Val Glu Glu Lys Thr Arg Ala Leu Met Ala Leu Lys Lys Arg Thr Lys  
 85 90 95

Asp Lys Leu Phe Gln Phe Leu Lys Leu Arg Lys Tyr Ser Ile Lys Val  
 100 105 110

His

&lt;210&gt; 271

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 271

Gln Met Gln His Phe Ala Ala Thr Leu Gln Ala Ser Leu Leu Ser Gly  
 1 5 10 15

Leu Gln Arg Leu Glu Arg Asp Arg Asp Trp Lys Gly Thr Arg Thr Glu  
 20 25 30

Gln Thr Gly Tyr Lys Asp Ser Lys Gln Phe His Ala Leu Cys Cys Tyr  
 35 40 45

Arg Gly Glu Gln Asn Ala Phe Ser Lys Asp Leu Lys Thr Leu Pro Ser  
 50 55 60

Leu Gln Glu Arg Ile Asp Ala Asp Arg Arg Ala Trp Thr Asp Val Met  
 65 70 75 80

Arg Thr Lys Glu Asn Arg Trp Leu Glu Met Thr Phe Ile Gln Gly His  
 85 90 95

Phe Val Arg Pro  
 100

&lt;210&gt; 272

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 272

Pro Arg Ile Pro Val Thr Leu Asn Met Lys Met Val Met Pro Ser Cys  
 1 5 10 15

Gln Gly Leu Asp  
 20

&lt;210&gt; 273

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 273

Cys Pro Pro Val Lys Ala Leu Ile Glu His Glu Met Lys Asn Gly Ile  
 1 5 10 15

Pro Ala Asn Arg Ile Val Leu Gly Gly Phe Ser Gln Gly Gly Ala Leu  
 20 25 30

Ser Leu Tyr Thr Ala Leu Thr Cys Pro His Pro Leu Ala Gly Ile Val  
 35 40 45

Ala Leu Ser Cys Trp Leu Pro Leu His Arg Ala Phe Pro Gln Ala Ala  
 50 55 60

Asn Gly Ser Ala Lys Asp Leu Ala Ile Leu Gln Cys His Gly Glu Leu  
 65 70 75 80

Asp Pro Met Val Pro Val Arg Phe Gly Ala Leu Thr Ala Glu Lys Leu  
 85 90 95

Arg Ser Val Val Thr Pro Ala Arg Val Gln Phe Lys Thr Tyr Pro Gly  
 100 105 110

Val Met His Ser Ser Cys Pro Gln Glu Met Ala Ala Val Lys Glu Phe  
 115 120 125

Leu Glu Lys Leu Leu Pro Pro Val  
 130 135

&lt;210&gt; 274

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 274

Met Trp Val Leu Lys Leu Asp Arg Asn Thr Met Asn Val Lys Ile Pro  
 1 5 10 15

Pro Ile Phe Cys Ser Lys Lys Lys Asn Pro Lys Asn Lys Lys Thr Asn  
 20 25 30

Lys Lys Pro Arg Met Phe Phe Gly Ile Thr Glu Ile Ser Gln Thr Trp  
 35 40 45

Val Phe Ser Tyr Ser Leu Cys Thr Phe Phe Gln Val Leu Cys Phe Ala  
 50 55 60  
 Cys Ser Thr Asp Cys Val Ile Leu Ile Phe Ile Asp Ser Ser Leu Ala  
 65 70 75 80  
 Met Gln Tyr Pro Cys Leu Thr His Arg Cys Leu  
 85 90

<210> 275  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 275  
 Glu Thr Ile Ala Asp Asn Ala Leu Pro Ser Thr Glu Ile Thr Leu Glu  
 1 5 10 15  
 Ser Pro Leu Leu Gly Ser Phe Asp Cys Leu Thr Gln Asp Val Leu Cys  
 20 25 30  
 His Ser Glu Val Phe Ile Trp Gly Arg Ser Leu Tyr Gly Asp Val Asn  
 35 40 45  
 Asp Ser Val Ser Gly Leu Cys Ile Thr Ser His Trp Ser Glu Thr Pro  
 50 55 60  
 Val Cys Gln Ala Trp Ile Leu His Cys Lys Thr  
 65 70 75

<210> 276  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 276  
 Gly Gly Lys Glu Lys Thr Lys Lys Ile Gln Leu Arg Asn Arg Thr Met  
 1 5 10 15  
 Ile Gln His Leu Gln Lys Ala Ser Ser Ile Ser Leu Lys Lys Ala Thr  
 20 25 30  
 Asp Cys Ala Ser Ala Gly Ser Glu Lys Gly Trp Ala Ala Gly Thr Ala  
 35 40 45  
 Ala Ser Trp Val Thr Arg Gln Gln Ser Gln Arg Leu Gly Val Arg Leu  
 50 55 60  
 Arg Thr Pro Leu Trp Pro Glu His Lys Arg His Trp His Cys Lys Leu  
 65 70 75 80  
 Ser Val Thr Trp Pro Ser Phe Leu Ser Ser Ile Ser Pro Asn Ile Cys  
 85 90 95  
 Ala His Pro Glu Glu Leu Ser Gly Asn Ser Arg Val Arg Ala Gly Arg  
 100 105 110

Arg Gly Glu Arg Thr Lys Arg Glu  
           115                  120

<210> 277  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 277  
 Val Ala Pro Phe Pro Ile Pro Thr Gln Glu His Arg Gly Gly Gly Glu  
   1                  5                  10                  15  
 Gly Arg Leu Ser Leu Ser Lys Ser Ser Tyr Leu His Phe Arg Arg Lys  
                   20                  25                  30  
 Ala Glu Thr Gln Ser Arg Leu Tyr Ile Asn Cys Leu Ala Asp Arg Val  
           35                  40                  45  
 Thr Lys Thr His Trp Ser Thr Cys Ala Phe Ser Ser Leu Cys Pro Ser  
   50                  55                  60  
 Leu Ile Gln Thr Ala Thr Cys Gln Ser Pro Ala Thr Leu Lys Thr His  
   65                  70                  75                  80  
 Gly Gln Leu Pro Gly Phe Thr Lys Leu Thr Ala Phe Leu His Lys Val  
                   85                  90                  95  
 Lys Thr Thr Thr Ala Ser Val Cys Gly Pro Ser Ala Thr Thr Lys Leu  
           100                  105                  110  
 Ser

<210> 278  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 278  
 Pro Tyr Asp Pro Ala Cys Leu Leu Ile Phe Ser Leu Pro Leu Pro Phe  
   1                  5                  10                  15  
 Leu Ser Leu Ser Ser Arg Ser His Leu Pro Gly Leu Lys Tyr Phe Val  
           20                  25                  30  
 Gly Ile Ala Tyr Tyr Ile Ile Leu Ala Asp Glu Pro Gln Asp Asn Val  
           35                  40                  45  
 Tyr Thr His Thr His Thr Tyr Thr His Thr Lys Ser Gln Leu Leu Lys  
   50                  55                  60  
 Ser Gly Leu Gly Ile Arg Leu Leu Cys Pro Val Lys Asn Ser Cys Thr  
   65                  70                  75                  80

Glu Val Ile Val Thr  
85

<210> 279  
<211> 69  
<212> PRT  
<213> Homo sapiens

<400> 279  
Asn Ser Phe Lys Val Val Lys Lys Leu Ala Thr Thr Trp Ser Leu Ser  
1 5 10 15  
Ile Lys Arg Lys Gln Gly Lys Gln Thr His Ser Leu Asp Gln Lys Lys  
20 25 30  
Leu Asp Gln Val His Trp Asn Gln Ser Val Thr Thr Gln Val Thr Met  
35 40 45  
Thr Ser Val Gln Glu Phe Phe Thr Gly His Arg Ser Leu Ile Pro Ser  
50 55 60  
Pro Leu Phe Asn Ser  
65

<210> 280  
<211> 593  
<212> PRT  
<213> Homo sapiens

<400> 280  
Val Ser Glu Lys Cys Arg Ile Asp Thr Glu Ile Leu Pro Ser Leu Phe  
1 5 10 15  
Met Arg Cys Thr Thr Asp Leu Asn Arg Lys Asp Lys Phe Pro Ala Ile  
20 25 30  
Thr His Leu Lys Phe Leu Ala Arg Asp Met Ser Glu Gln Val Leu Leu  
35 40 45  
Cys Ala Ser Ser Gln Thr Ser Ser Ile Val Glu Cys Trp Ser Leu Arg  
50 55 60  
Lys Glu Gly Leu Pro Val Asn Asn Ile Phe Gln Gln Ile Ser Pro Val  
65 70 75 80  
Val Gly Asp Lys Gln Pro Thr Ile Leu Lys Trp Arg Ile Leu Ser Ala  
85 90 95  
Thr Asn Asp Leu Asp Arg Val Ser Ala Val Ala Leu Pro Lys Leu Pro  
100 105 110  
Ile Ser Leu Thr Asn Thr Asp Leu Lys Val Ala Ser Asp Thr Gln Phe  
115 120 125  
Tyr Pro Gly Leu Gly Leu Ala Leu Ala Phe His Asp Gly Ser Val His  
130 135 140

Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met	Ala	Val	Phe	Tyr	Ser	Ser	145	150	155	160
Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala	Met	Lys	Arg	Pro	Arg	Thr	165	170	175	
Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met	Gln	Leu	Ser	Trp	Thr	Ser	180	185	190	
Leu	Ala	Leu	Val	Gly	Ile	Asp	Ser	His	Gly	Lys	Leu	Ser	Val	Leu	Arg	195	200	205	
Leu	Ser	Pro	Ser	Met	Gly	His	Pro	Leu	Glu	Val	Gly	Leu	Ala	Leu	Arg	210	215	220	
His	Leu	Leu	Phe	Leu	Leu	Glu	Tyr	Cys	Met	Val	Thr	Gly	Tyr	Asp	Trp	225	230	235	240
Trp	Asp	Ile	Leu	Leu	His	Val	Gln	Pro	Ser	Met	Val	Gln	Ser	Leu	Val	245	250	255	
Glu	Lys	Leu	His	Glu	Glu	Tyr	Thr	Arg	Gln	Thr	Ala	Ala	Leu	Gln	Gln	260	265	270	
Val	Leu	Ser	Thr	Arg	Ile	Leu	Ala	Met	Lys	Ala	Ser	Leu	Cys	Lys	Leu	275	280	285	
Ser	Pro	Cys	Thr	Val	Thr	Arg	Val	Cys	Asp	Tyr	His	Thr	Lys	Leu	Phe	290	295	300	
Leu	Ile	Ala	Ile	Ser	Ser	Thr	Leu	Lys	Ser	Leu	Leu	Arg	Pro	His	Phe	305	310	315	320
Leu	Asn	Thr	Pro	Asp	Lys	Ser	Pro	Gly	Asp	Arg	Leu	Thr	Glu	Ile	Cys	325	330	335	
Thr	Lys	Ile	Thr	Asp	Val	Asp	Ile	Asp	Lys	Val	Met	Ile	Asn	Leu	Lys	340	345	350	
Thr	Glu	Glu	Phe	Val	Leu	Asp	Met	Asn	Thr	Leu	Gln	Ala	Leu	Gln	Gln	355	360	365	
Leu	Leu	Gln	Trp	Val	Gly	Asp	Phe	Val	Leu	Tyr	Leu	Leu	Ala	Ser	Leu	370	375	380	
Pro	Asn	Gln	Gly	Ser	Leu	Leu	Arg	Pro	Gly	His	Ser	Phe	Leu	Arg	Asp	385	390	395	400
Gly	Thr	Ser	Leu	Gly	Met	Leu	Arg	Glu	Leu	Met	Val	Val	Ile	Arg	Ile	405	410	415	
Trp	Gly	Leu	Leu	Lys	Pro	Ser	Cys	Leu	Pro	Val	Tyr	Thr	Ala	Thr	Ser	420	425	430	
Asp	Thr	Gln	Asp	Ser	Met	Ser	Leu	Leu	Phe	Arg	Leu	Leu	Thr	Lys	Leu	435	440	445	



Trp Ile Cys Cys Arg Asp Glu Gly Pro Ala Ser Glu Pro Asp Glu Ala  
 450 455 460  
 Leu Val Asp Glu Cys Cys Leu Leu Pro Ser Gln Leu Leu Ile Pro Ser  
 465 470 475 480  
 Leu Asp Trp Leu Pro Ala Ser Asp Gly Leu Val Ser Arg Leu Gln Pro  
 485 490 495  
 Lys Gln Pro Leu Arg Leu Gln Phe Gly Arg Ala Pro Thr Leu Pro Gly  
 500 505 510  
 Ser Ala Ala Thr Leu Gln Leu Asp Gly Leu Ala Arg Ala Pro Gly Gln  
 515 520 525  
 Pro Lys Ile Asp His Leu Arg Arg Leu His Leu Gly Ala Cys Pro Thr  
 530 535 540  
 Glu Glu Cys Lys Ala Cys Thr Arg Cys Gly Cys Val Thr Met Leu Lys  
 545 550 555 560  
 Ser Pro Asn Arg Thr Thr Ala Val Lys Gln Trp Glu Gln Arg Trp Ile  
 565 570 575  
 Lys Asn Cys Leu Cys Gly Gly Leu Trp Trp Arg Val Pro Leu Ser Tyr  
 580 585 590

Pro

<210> 281  
 <211> 292  
 <212> PRT  
 <213> Homo sapiens

<400> 281  
 Leu Arg Gly Thr Arg His Gln Ser Pro Pro His Arg Gln Phe Leu Ile  
 1 5 10 15  
 Gln Arg Cys Ser His Cys Phe Thr Ala Val Val Leu Leu Gly Asp Leu  
 20 25 30  
 Ser Met Val Thr Gln Pro His Leu Val Gln Ala Leu His Ser Ser Val  
 35 40 45  
 Gly Gln Ala Pro Arg Cys Ser Leu Arg Arg Trp Ser Ile Leu Gly Trp  
 50 55 60  
 Pro Gly Ala Leu Ala Arg Pro Ser Ser Cys Arg Val Ala Ala Leu Pro  
 65 70 75 80  
 Gly Ser Val Gly Ala Arg Pro Asn Cys Arg Arg Arg Gly Cys Leu Gly  
 85 90 95  
 Cys Arg Arg Leu Thr Arg Pro Ser Leu Ala Gly Ser Gln Ser Arg Leu  
 100 105 110

Ser Leu Val Trp  
290

<211> 172

<213> Home

Thr Pro A

Ser	Asn	Pro	Gln	Thr	Val	Gly	Val	Gly	Arg	Gly	Arg	Phe	Thr	Thr	Tyr
				85					90						
Glu	Ile	Arg	Val	Lys	Thr	Asn	Leu	Pro	Ile	Phe	Lys	Leu	Lys	Glu	Ser
				100					105						
Thr	Val	Arg	Arg	Arg	Tyr	Ser	Asp	Phe	Glu	Trp	Leu	Arg	Ser	Glu	Leu
				115					120						
Glu	Arg	Glu	Ser	Lys	Val	Val	Val	Pro	Pro	Leu	Pro	Gly	Lys	Ala	Phe
				130					135						
Leu	Arg	Gln	Phe	Leu	Leu	Glu	Glu	Met	Met	Glu	Tyr	Leu	Met	Thr	Ile
145					150					155					
Leu	Leu	Arg	Lys	Glu	Asn	Lys	Gly	Trp	Ser	Ser	Leu				
				165					170						

```
<210> 283
<211> 106
<212> PRT
<213> Homo sapiens
```

```

<400> 283
Asn Tyr Leu Gly Arg Phe Gln Pro Gln Trp Phe Asn Asp Asn Lys Thr
  1                               5          10          15
Thr Lys His Gly Thr Ser Asn Ser Leu Ile Lys Leu Leu Ser His Leu
                20          25          30
Phe His Arg Met Met Arg Phe Phe Leu Phe Thr Val Ser His Gln Gly
          35          40          45
Lys Lys Asn Pro Pro Thr Ser Cys Leu Phe Phe Phe Leu Met Pro Gly
  50          55          60
Ile Ser Ile His Cys Leu Phe Lys Arg Pro Met Gln Lys Lys Val Asp
  65          70          75          80
Lys Ala Leu Ala Gln Glu Leu Gly Leu Pro Val Val Val Pro Gly Leu
                85          90          95
Pro Cys Trp Gly Val Pro Lys Ser Val Pro
          100          105

```

```
<210> 284
<211> 105
<212> PRT
<213> Homo sapiens
```

```

<400> 284
Met Gly Asn Phe Phe Phe Phe Glu Pro Gly Thr Cys Tyr Val Ala Gln
  1                    5                10                15

Ala Gly Leu Glu Leu Leu Asn Ser Ser Asp Pro Leu Thr Ser Ala Ser
      20                25                30

```

Gln	Ile	Ala	Glu	Thr	Thr	Gly	Thr	His	His	Cys	Thr	Trp	Leu	Lys	Thr
		35					40					45			
Ile	Phe	Leu	Lys	Asn	Lys	Ser	Thr	Ala	Leu	His	Leu	Tyr	Leu	Leu	Val
	50					55					60				
Ser	Leu	Gln	Phe	Lys	His	Thr	Ile	Asn	Asp	Tyr	Asn	Ile	Leu	Phe	Lys
65				70					75						80
Ala	Gly	Arg	Ser	Gly	Ser	Trp	Leu	Gln	Leu	Glu	Gln	Phe	Ile	Thr	Ser
				85				90						95	
Gly	Tyr	Leu	Arg	Ala	Arg	Lys	Ile	Gln							
			100				105								

```
<210> 285
<211> 118
<212> PRT
<213> Homo sapiens
```

```

<400> 285
Thr Gly Met Gly Gly Gly Ser Gly Cys Arg Glu Leu Leu Cys Pro Cys
  1          5          10          15

Lys Gly Ala Glu Thr Pro Val Glu Leu Arg Lys Ser Asp Gly Ile Tyr
          20          25          30

Arg Val Leu Gly Lys Pro Trp Leu Cys Leu His His Gly Glu Arg Pro
          35          40          45

Trp Ala Gly Ser Pro Pro Ser Cys Arg Ser Val Arg Leu Asp Ala Asp
  50          55          60

Gly Gly Ser Asp Gln Leu Ala Ser Val Ser Leu Arg His Glu Ala Ala
  65          70          75          80

Phe Ser Ser Gly Phe Gln Ser His Ser Gly Leu Pro Met Ala Asp Arg
          85          90          95

Val Ala Lys Val Arg Asn Gly Lys Cys Ile Ala Val Tyr Leu Pro Ser
          100          105          110

Pro Thr Lys Gln Ile Thr
          115

```

```
<210> 286
<211> 109
<212> PRT
<213> Homo sapiens
```

<400> 286  
Tyr Ala Asn Gln Ser Ser Ser Leu Arg Phe Lys Ile Lys Tyr Lys Leu  
1 5 10 15

Leu Cys Phe Ser Thr His Ser Gly Ser Ile Val Pro Glu Pro Asp Cys  
                   20                  25                  30  
 Tyr Phe Phe Ile Leu Asn Ile Ile Phe Pro His Leu Ile Cys Leu Pro  
                   35                  40                  45  
 Leu Ile His Arg His Leu Glu Lys Glu Met Gly Gly Cys Leu Leu Ser  
                   50                  55                  60  
 Leu Ser Leu Cys Phe Val Pro Val Val Arg Leu Ala Ala Ser Val Ala  
                   65                  70                  75                  80  
 Arg Trp Ala Trp Leu Glu Pro Trp Val Arg Gln Val Ala Gly Gly Asp  
                   85                  90                  95  
 Arg Glu Arg Leu Arg Gly Lys Trp Trp His Leu Leu Leu  
                   100                  105

<210> 287  
 <211> 74  
 <212> PRT  
 <213> Homo sapiens

<400> 287  
 Ser Gln Leu Leu Gly Arg Leu Arg Gln Glu Asn His Leu Asn Ser Gly  
           1                  5                  10                  15  
 Gly Arg Gly Cys Ser Glu Leu Arg Ser Cys His Cys Thr Pro Ala Trp  
                   20                  25                  30  
 Ala Thr Arg Val Lys Leu Arg Leu Lys Lys Lys Lys Lys Glu Met Phe  
                   35                  40                  45  
 Phe Ile Phe Phe Met Leu Ser Ile Gln Ala Leu Phe His Gly Gln Gln  
                   50                  55                  60  
 Val Ile Phe His Asn Val Asp Phe Pro Lys  
                   65                  70

<210> 288  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 288  
 Arg Arg Gly Phe Leu His Val Gly Gln Ala Gly Leu Glu Phe Leu Thr  
           1                  5                  10                  15  
 Ser Gly Asp Pro Pro Ala Ser Ala Thr Gln Ser Ala Gly Ile Thr Gly  
                   20                  25                  30  
 Ile Ser His Arg Glu Arg Pro Ile Leu Leu Phe Ile Tyr Phe Leu Arg  
                   35                  40                  45  
 Trp Ser Leu Ala Leu Phe Arg Asp Leu Arg Pro Leu Gln Pro Ser Pro  
                   50                  55                  60

Leu Gln Phe  
65

<210> 289  
<211> 84  
<212> PRT  
<213> Homo sapiens

<220>  
<221> MOD\_RES  
<222> (1)..(84)  
<223> Any naturally occurring amino acid

<400> 289  
Ser Thr Arg Pro Arg Glu Arg Arg Asn Arg Ser Val Asp Glu Cys Gln  
1 5 10 15  
Leu Ile Asn Val Lys Xaa Arg His Xaa Leu Val Cys Leu Xaa Cys Phe  
20 25 30  
Cys Leu Tyr Xaa Gln Pro Asp Xaa Val Ser Xaa Glu Tyr Lys Xaa Trp  
35 40 45  
Gly Leu Leu Pro Gln Xaa Leu Phe Xaa Ile Ser Xaa Glu Lys Lys Asn  
50 55 60  
Asp Arg Xaa Xaa Gly Xaa Ile Xaa Arg Xaa Ala Arg Phe Xaa Ser Thr  
65 70 75 80  
Asn Xaa Asn Xaa

<210> 290  
<211> 77  
<212> PRT  
<213> Homo sapiens

<220>  
<221> MOD\_RES  
<222> (1)..(72)  
<223> Any naturally occurring amino acid

<400> 290  
Met Ser Xaa Xaa Asp Thr Xaa Trp Cys Val Xaa Ala Val Phe Ala Phe  
1 5 10 15  
Thr Xaa Asn Pro Thr Val Phe His Xaa Asn Thr Asn Xaa Gly Xaa Phe  
20 25 30  
Tyr Pro Xaa Leu Ser Ser Xaa Leu Val Lys Lys Lys Lys Met Ile Gly  
35 40 45  
Xaa Xaa Xaa Glu Phe Xaa Gly Lys Pro Xaa Xaa Gln Ala Leu Xaa Lys  
50 55 60

Ile Xaa Ser Trp Xaa Xaa Leu Thr Ser Leu Pro Xaa Xaa  
 65 70 75

<210> 291

<211> 309

<212> PRT

<213> Homo sapiens

<400> 291

Arg Ala Ala Ser Gly Arg Ser Gly Ser Ser Val Arg Met Ser Ala Pro  
 1 5 10 15

Arg Ser Arg Pro Ala Ser Met Arg Trp Cys Pro Ala Pro Arg Arg Ala  
 20 25 30

Cys Thr Thr Ser Thr Arg Trp Thr Gly Pro Pro Cys Ala Thr Ser Thr  
 35 40 45

Ser Ser Ala Arg Ala Thr Arg Thr Gly Pro Ser Cys Arg Ser Ala Gly  
 50 55 60

Arg Ala Arg Ser Ala Ser Tyr Pro Pro Gly Asp Val Asp Glu Ile Pro  
 65 70 75 80

Asp Trp Val His Gln Leu Val Ile Gln Lys Leu Val Glu His Arg Val  
 85 90 95

Ile Pro Glu Gly Phe Val Asn Ser Ala Val Ile Asn Asp Tyr Gln Pro  
 100 105 110

Gly Gly Cys Ile Val Ser His Val Asp Pro Ile His Ile Phe Glu Arg  
 115 120 125

Pro Ile Val Ser Val Ser Phe Phe Ser Asp Ser Ala Leu Cys Phe Gly  
 130 135 140

Cys Lys Phe Gln Phe Lys Pro Ile Arg Val Ser Glu Pro Val Leu Ser  
 145 150 155 160

Leu Pro Val Arg Arg Gly Ser Val Thr Val Leu Ser Gly Tyr Ala Ala  
 165 170 175

Asp Glu Ile Thr His Cys Ile Arg Pro Gln Asp Ile Lys Glu Arg Arg  
 180 185 190

Ala Val Ile Ile Leu Arg Lys Thr Arg Leu Asp Ala Pro Arg Leu Glu  
 195 200 205

Thr Lys Ser Leu Ser Ser Ser Val Leu Pro Pro Ser Tyr Ala Ser Asp  
 210 215 220

Arg Leu Ser Gly Asn Asn Arg Asp Pro Ala Leu Lys Pro Lys Arg Ser  
 225 230 235 240

His Arg Lys Ala Asp Pro Asp Ala Ala His Arg Pro Arg Ile Leu Glu  
 245 250 255

Met Asp Lys Glu Glu Asn Arg Arg Ser Val Leu Leu Pro Thr His Arg  
                   260                  265                  270

Arg Arg Gly Ser Phe Ser Ser Glu Asn Tyr Trp Arg Lys Ser Tyr Glu  
           275                  280                  285

Ser Ser Glu Asp Cys Ser Glu Ala Ala Gly Ser Pro Ala Arg Lys Val  
       290                  295                  300

Lys Met Arg Arg His  
 305

<210> 292  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 292  
 Ser Cys Leu Pro Glu Asp Asp Asp Cys Ser Ala Leu Leu Asp Val Leu  
   1                  5                  10                  15

Arg Pro Tyr Ala Val Ser Asp Phe Ile Ser Ser Ile Ser Thr Glu His  
                   20                  25                  30

Ser His Ala Ser Pro Ala His Arg Gln Gly Lys His Trp Phe Arg His  
       35                  40                  45

Pro Asn Arg Leu Glu Leu Glu Leu Ala Ala Glu Ala Gln Arg Arg Val  
       50                  55                  60

Ala Lys Glu Gly His Gly His Asp Gly Ala Leu Glu Asp Val Asp Gly  
       65                  70                  75                  80

Val His Val Gly His Asp Ala Ala Ala Gly Leu Val Val Val Asp Asp  
                   85                  90                  95

Arg Ala Val Asp Glu Ala Leu Gly Asp Asp Ala Val Leu His Gln Leu  
       100                  105                  110

Leu Asp His Gln Leu Met His Pro Val Arg Asp Leu Val Asp Val Ala  
       115                  120                  125

Arg Arg Val Arg Gly Ala Pro Gly Pro Ala Arg Ala Ser Ala Ala Gly  
       130                  135                  140

Pro Arg Thr Cys Ser Pro Arg Arg Arg Ser Thr Cys Cys Ala Gly Gly  
       145                  150                  155                  160

Pro Gly Pro Pro Cys Ala Arg Cys Thr Gly Pro Ser Arg Arg Gly Thr  
                   165                  170                  175

Pro Pro His Arg Cys Gly Pro Arg Ser Trp Ser Thr His Pro Asp  
       180                  185                  190

<210> 293  
 <211> 478



&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 293

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Met Gly Arg Cys Cys Phe Tyr Thr Ala Gly Thr Leu Ser Leu Leu Leu
 1           5           10           15

Leu Val Thr Ser Val Thr Leu Leu Val Ala Arg Val Phe Gln Lys Ala
      20           25           30

Val Asp Gln Ser Ile Glu Lys Lys Ile Val Leu Arg Asn Gly Thr Glu
      35           40           45

Ala Phe Asp Ser Trp Glu Lys Pro Pro Leu Pro Val Tyr Thr Gln Phe
      50           55           60

Tyr Phe Phe Asn Val Thr Asn Pro Glu Glu Ile Leu Arg Gly Glu Thr
      65           70           75           80

Pro Arg Val Glu Glu Val Gly Pro Tyr Thr Tyr Arg Glu Leu Arg Asn
      85           90           95

Lys Ala Asn Ile Gln Phe Gly Asp Asn Gly Thr Thr Ile Ser Ala Val
      100          105          110

Ser Asn Lys Ala Tyr Val Phe Glu Arg Asp Gln Ser Val Gly Asp Pro
      115          120          125

Lys Ile Asp Leu Ile Arg Thr Leu Asn Ile Pro Val Leu Thr Val Ile
      130          135          140

Glu Trp Ser Gln Val His Phe Leu Arg Glu Ile Ile Glu Ala Met Leu
      145          150          155          160

Lys Ala Tyr Gln Gln Lys Leu Phe Val Thr His Thr Val Asp Glu Leu
      165          170          175

Leu Trp Gly Tyr Lys Asp Glu Ile Leu Ser Leu Ile His Val Phe Arg
      180          185          190

Pro Asp Ile Ser Pro Tyr Phe Gly Leu Phe Tyr Glu Lys Asn Gly Thr
      195          200          205

Asn Asp Gly Asp Tyr Val Phe Leu Thr Gly Glu Asp Ser Tyr Leu Asn
      210          215          220

Phe Thr Lys Ile Val Glu Trp Asn Gly Lys Thr Ser Leu Asp Trp Trp
      225          230          235          240

Ile Thr Asp Lys Cys Asn Met Ile Asn Gly Thr Asp Gly Asp Ser Phe
      245          250          255

His Pro Leu Ile Thr Lys Asp Glu Val Leu Tyr Val Phe Pro Ser Asp
      260          265          270

Phe Cys Arg Ser Val Tyr Ile Thr Phe Ser Asp Tyr Glu Ser Val Gln
      275          280          285

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Gly Leu Pro Ala Phe Arg Tyr Lys Val Pro Ala Glu Ile Leu Ala Asn  
 290 295 300  
 Thr Ser Asp Asn Ala Gly Phe Cys Ile Pro Glu Gly Asn Cys Leu Gly  
 305 310 315 320  
 Ser Gly Val Leu Asn Val Ser Ile Cys Lys Asn Gly Ala Pro Ile Ile  
 325 330 335  
 Met Ser Phe Pro His Phe Tyr Gln Ala Asp Glu Arg Phe Val Ser Ala  
 340 345 350  
 Ile Glu Gly Met His Pro Asn Gln Glu Asp His Glu Thr Phe Val Asp  
 355 360 365  
 Ile Asn Pro Leu Thr Gly Ile Ile Leu Lys Ala Ala Lys Arg Phe Gln  
 370 375 380  
 Ile Asn Ile Tyr Val Lys Lys Leu Asp Asp Phe Val Glu Thr Gly Asp  
 385 390 395 400  
 Ile Arg Thr Met Val Phe Pro Val Met Tyr Leu Asn Glu Ser Val His  
 405 410 415  
 Ile Asp Lys Glu Thr Ala Ser Arg Leu Lys Ser Met Ile Asn Thr Thr  
 420 425 430  
 Leu Ile Ile Thr Asn Ile Pro Tyr Ile Ile Met Ala Leu Gly Val Phe  
 435 440 445  
 Phe Gly Leu Val Phe Thr Trp Leu Ala Cys Lys Gly Gln Gly Ser Met  
 450 455 460  
 Asp Glu Gly Thr Ala Asp Glu Arg Ala Pro Leu Ile Arg Thr  
 465 470 475

&lt;210&gt; 294

&lt;211&gt; 266

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 294

Ala Phe Leu Pro Ser Pro Thr Val Ala Ala Gln Ala Ala Ala Arg Glu  
 1 5 10 15  
 His Ala Gly Gly His Ser Ala Ala Lys Asn Gly Ala Thr Gly Val Glu  
 20 25 30  
 Leu Asp Ile Glu Phe Thr Ser Asp Gly Ile Pro Val Leu Met His Asp  
 35 40 45  
 Asn Thr Val Asp Arg Thr Thr Asp Gly Thr Gly Arg Leu Cys Asp Leu  
 50 55 60  
 Thr Phe Glu Gln Ile Arg Lys Leu Asn Pro Ala Ala Asn His Arg Leu  
 65 70 75 80



<400> 295  
Gln Ile Leu Pro Ala Phe Ile Leu Leu Phe Asn Gly Leu Lys Arg Ala  
1 5 10 15  
Tyr Ala Cys His Ala Glu His Glu Thr Glu Glu Leu Gly Ser Asp Glu  
20 25 30  
Asp Asp Ile Asp Glu Asp Gly Gln Glu Tyr Leu Glu Ile Leu Ala Lys  
35 40 45  
Gln Ala Gly Glu Asp Gly Asp Asp Glu Asp Trp Glu Glu Asp Asp Ala  
50 55 60  
Glu Glu Thr Ala Leu Glu Gly Tyr Ser Thr Ile Ile Asp Asp Glu Asp  
65 70 75 80

132

Asn Pro Val Asp Glu Tyr Gln Ile Phe Lys Ala Ile Phe Gln Thr Ile  
85 90 95  
Gln Asn Arg Asn Pro Val Trp Tyr Gln Ala Leu Thr His Gly Leu Asn  
100 105 110  
Glu Glu Gln Arg Lys Gln Leu Gln Asp Ile Ala Thr Leu Ala Asp Gln  
115 120 125  
Arg Arg Ala Ala His Glu Ser Lys Met Ile Glu Lys His Gly Gly Tyr  
130 135 140  
Lys Phe Ser Ala Pro Val Val Pro Ser Ser Phe Asn Phe Gly Gly Pro  
145 150 155 160  
Ala Pro Gly Met Asn  
165

<210> 296  
<211> 13  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Partial cDNA  
sequence e.g., EST or contig S

<400> 296  
gcctcaagtt atc

13

<210> 297  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Consensus  
sequence C

<400> 297  
atgtcctagc ctcaagttat cagatgcaa

29